

=&gt; D IBIB AB HITSTR

L8 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:1314 CAPLUS

DOCUMENT NUMBER: 150:98660

TITLE: Preparation of targeting conjugates comprising active agents encapsulated in cyclodextrin-containing polymers

INVENTOR(S): Gnaim, Jallal M.; Athamna, Muhammad

PATENT ASSIGNEE(S): Capsutech Ltd., Israel

SOURCE: PCT Int. Appl., 60pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009001364	A2	20081231	WO 2008-IL884	20080629
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2007-946775P P 20070628

AB The invention provides a targeting conjugate comprising an active agent, one or more residues of a cyclodextrin (CD)-containing polymer, and a biorecognition mol. The polymer is preferably a peptide or a polypeptide comprising at least one amino acid residue containing a functional side group to which at least one of the CD residues is linked covalently, the biorecognition mol. is covalently bonded directly or via a spacer to the polymer backbone of the CD-containing polymer, and the active agent is noncovalently encapsulated within the cavity of the cyclodextrin residues and/or entrapped within the polymer matrix of the CD-containing polymer. Thus, conjugates of di-CD-Glu-PEG3350-FA (FA = folic acid), tri-CD-Glu-Glu-PEG3350-FA, and CD-polyGlu-PEG3350-FA encapsulating the fluorescent compound rhodamine-B were prepared and tested for their capacity to bind to human nasopharyngeal KB cancer cells, which overexpress the folate receptor. The data indicate that encapsulating and targeting the delivery of an active agent using the conjugates of the invention is far more effective compared to non-encapsulated and non-targeted delivery.

IT 1094725-28-6DP, pegylated, folic acid derivative1094725-30-ODP, pegylated, folic acid derivative

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(preparation of targeting conjugates comprising active agents encapsulated in cyclodextrin-containing polymers)

RN 1094725-28-6 CAPLUS

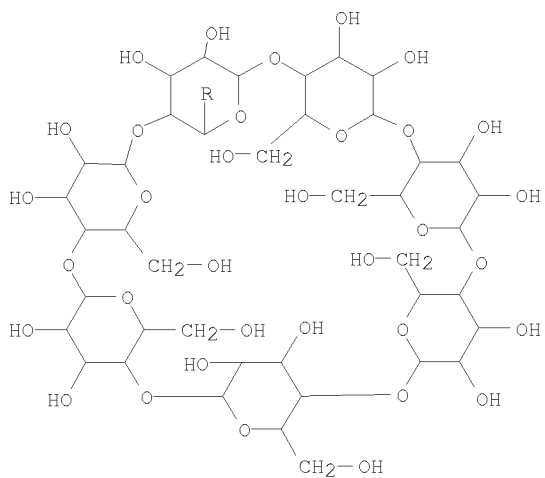
CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-, compd. with 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride (1:1:1) (CA INDEX NAME)

CM 1

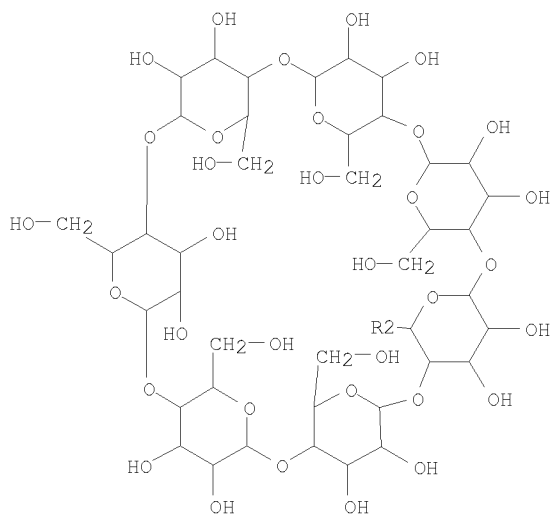
CRN 942936-99-4

CMF C94 H154 N4 O73

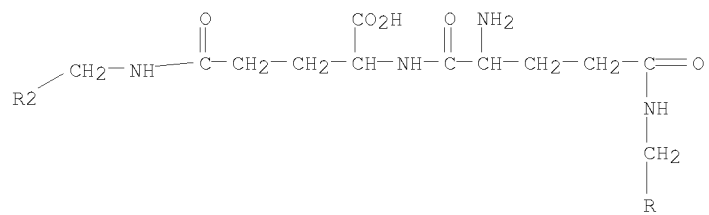
PAGE 1-A



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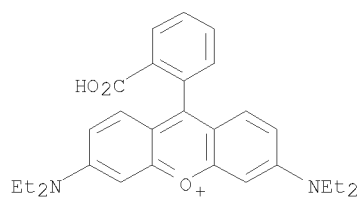


CM 2

CRN 81-88-9

CMF C28 H31 N2 O3 . C1

10576346



● Cl<sup>-</sup>

RN 1094725-30-0 CAPLUS  
CN L-Glutamamide, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N1,N5-bis(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-, compd. with 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride (1:1:1) (CA INDEX NAME)

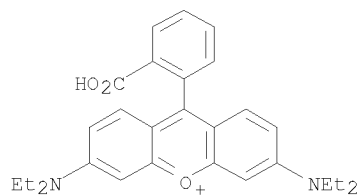
CM 1

CRN 1094725-14-0  
CMF C136 H223 N5 O106

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

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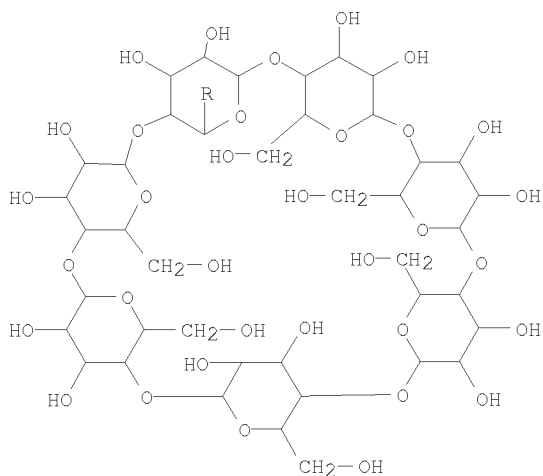
CRN 81-88-9  
CMF C28 H31 N2 O3 . Cl



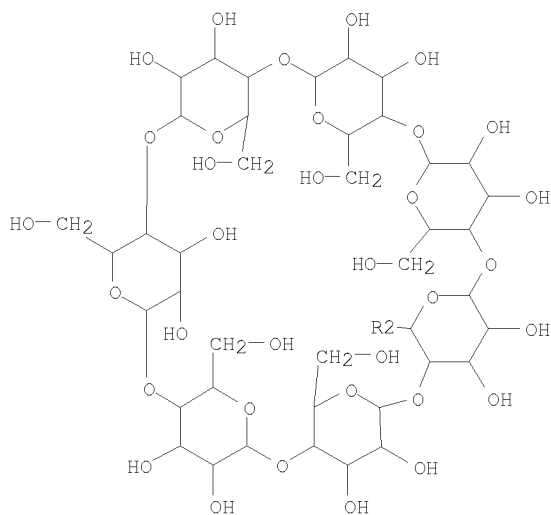
● Cl<sup>-</sup>

IT **942936-99-4**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of targeting conjugates comprising active agents encapsulated in **cyclodextrin**-containing polymers)  
RN 942936-99-4 CAPLUS  
CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (CA INDEX NAME)

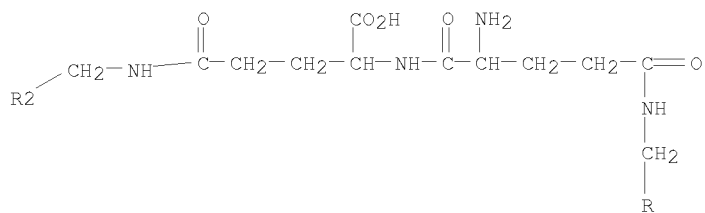
PAGE 1-A



PAGE 2-A



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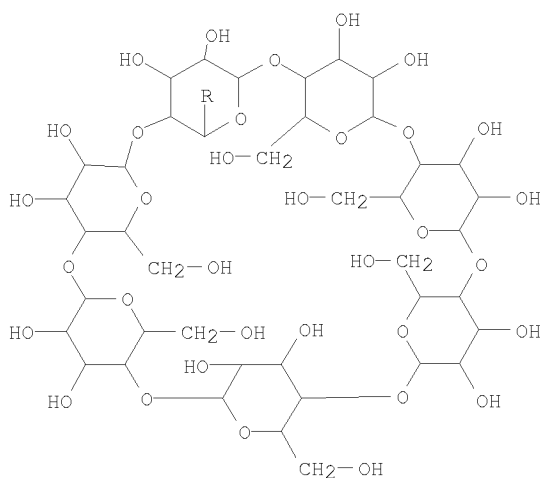
IT **942936-99-4DP**, Jeffamine, and folic acid derivative  
**1094725-14-0DP**, succinic anhydride, Jeffamine, and folic acid  
 derivs.  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of targeting conjugates comprising active agents encapsulated

in cyclodextrin-containing polymers)

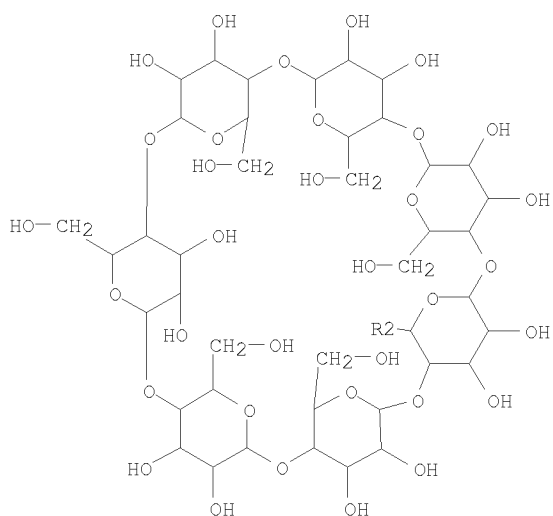
RN 942936-99-4 CAPLUS

CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (CA INDEX NAME)

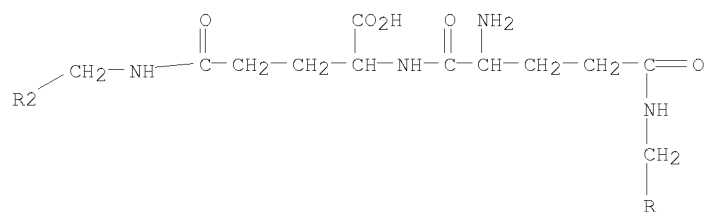
PAGE 1-A



PAGE 2-A



PAGE 3-A



RN 1094725-14-0 CAPLUS

CN L-Glutamamide, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-N1,N5-bis(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

=> D IBIB AB HITSTR 2

L8 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:790915 CAPLUS

DOCUMENT NUMBER: 149:201555

TITLE: Early Stages of Formation of Branched Host-Guest Supramolecular Polymers

AUTHOR(S): Galantini, Luciano; Jover, Aida; Leggio, Claudia; Meijide, Francisco; Pavel, Nicolae Viorel; Soto Tellini, Victor Hugo; Vazquez Tato, Jose; Tortolini, Cristina

CORPORATE SOURCE: Dipartimento di Chimica and Research Center, SOFT-INFN-CNR, Sapienza Universita di Roma, Rome, 00185, Italy

SOURCE: Journal of Physical Chemistry B (2008), 112(29), 8536-8541

CODEN: JPCBFK; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A structural characterization of host-guest supramol. copolymers, formed by an adamantane dimer and two  $\beta$ -cyclodextrin trimers in aqueous solution, has been carried out by combining small angle X-ray scattering and light scattering expts. A shape-reconstruction method was applied to the SAXS data to obtain relatively high-resolution conformation information, and a correlation with the exptl. dynamic light scattering results was performed, by estimating the hydrodynamic radii of the reconstructed shape through a shell model method. When applied on the solns. of the trimers, the anal. provides a globular reconstructed shape with a hydrodynamic radius in agreement with the exptl. one. For the polymers, elongated structures were inferred which grow both in length and in cross section by increasing the concentration. Depending on the  $\beta$ -cyclodextrin trimer employed in the polymer preparation, polymerization degrees ranging between roughly 7 and 14 or 9 and 22 were obtained in the concentration range 4.00-10.0 or 3.10-6.60 mM of the trimer (6.00-15.0 or 4.65-9.90 mM of the dimer). Aggregation schemes were proposed accounting for the formation of hyperbranched, linear, and network like polymers. The exptl. results are not far from those expected on the basis of the aggregation in hyperbranched structure, for which the growth of elongated aggregates can be predicted in the early stages of the polymerization. However, the coexistence of the other structures, in particular of the linear one, cannot be ruled out.

IT **371161-86-3**

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(early stages of formation of branched host-guest supramol. polymers)

RN 371161-86-3 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A,6''A-[nitrilotris[(1-oxo-2,1-ethanediyl)imino]]tris[6A-deoxy- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT **1041852-10-1P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(early stages of formation of branched host-guest supramol. polymers)

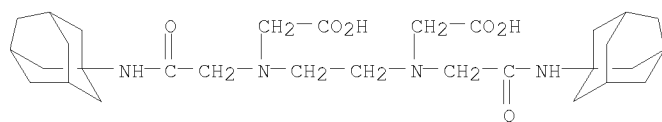
RN 1041852-10-1 CAPLUS

CN Glycine, N,N'-1,2-ethanediylbis[N-[2-oxo-2-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylamino)ethyl]-, sodium salt (1:2), polymer with 6A,6'A,6''A-[nitrilotris[(1-oxo-2,1-ethanediyl)imino]]tris[6A-deoxy- $\beta$ -cyclodextrin] (CA INDEX NAME)

CM 1

CRN 889126-45-8

CMF C30 H46 N4 O6 . 2 Na



● 2 Na

CM 2

CRN 371161-86-3

CMF C132 H216 N4 O105

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D IBIB AB HITSTR 3

L8 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:566485 CAPLUS

DOCUMENT NUMBER: 149:113163

TITLE: Physico-chemical investigation of asymmetrical peptidolipidyl-**cyclodextrins**

AUTHOR(S): Angelova, Angelina; Fajolles, Christophe; Hocquelet, Celine; Djedaini-Pilard, Florence; Lesieur, Sylviane; Bonnet, Veronique; Perly, Bruno; Lebas, Genevieve; Maucclair, Laurent

CORPORATE SOURCE: CNRS UMR8612 Physico-chimie, Pharmacotechnie, Biopharmacie, Equipe Physico-chimie des Systemes Polyphases, Universite Paris Sud, Chatenay-Malabry, F-92290, Fr.

SOURCE: Journal of Colloid and Interface Science (2008), 322(1), 304-314

CODEN: JCISA5; ISSN: 0021-9797

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new class of amphiphilic peptidolipidyl-**cyclodextrins** is reported. The derivs. are chiral due to the presence of an L-leucine in the spacer arm that links a saccharide moiety and a grafted, saturated hydrocarbon chain. Self-assembly properties of the peptidolipidyl-**cyclodextrins** are characterized by quasi-elastic light scattering, turbidity and UV-visible absorption measurements. NMR expts. give insight into the intermol. dipolar interactions as a function of temperature and concentration N-dodecyl- N  $\alpha$  -(6I-amidosuccinyl-6I-deoxy-cyclomaltoheptaose)-L-leucine (1) is poorly soluble in aqueous media. N-dodecyl- N  $\alpha$  -(6I-amidosuccinyl-6I-deoxy-2I,3I-di-O-methyl-hexakis-(2II-VII,3II-VII,6II-VII-tri-O-methyl)-cyclomaltoheptaose)-L-leucine (2) is found to be more soluble and self-assembles into stable supramol. colloidal aggregates with nanometric dimensions above a critical aggregation concentration (CAC). It has a propensity for solubilization of hydrophobic species revealing a micellar-like behavior, which is compared to that of the non-ionic detergent octyl glucoside. On the contrary, compound 1 ppts. in a crystalline phase beyond its water solubility limit, and it does not display any solubilizing capacity. The observed behavior corroborates at the mol. level with the NMR results.

IT **1035018-08-6P 1035018-11-1P**

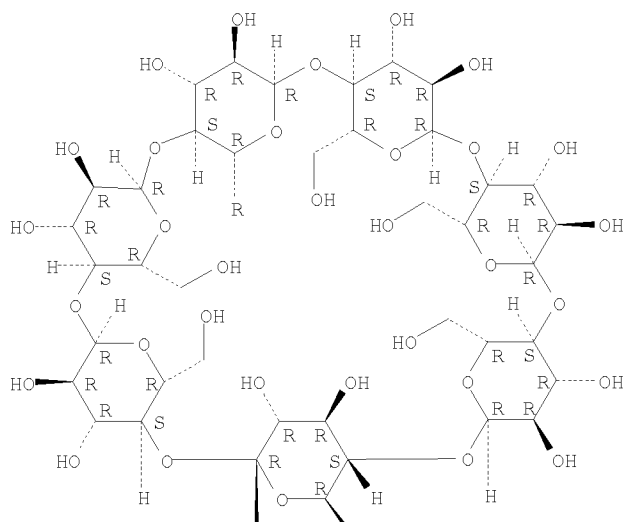
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(self-assembly and micellar solubilization of amphiphilic peptidolipidyl-**cyclodextrin**)

RN 1035018-08-6 CAPLUS

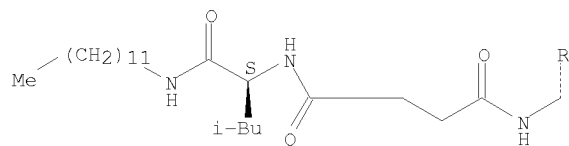
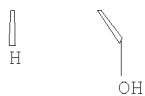
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[(1S)-1-[(dodecylamino)carbonyl]-3-methylbutyl]amino]-1,4-dioxobutyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

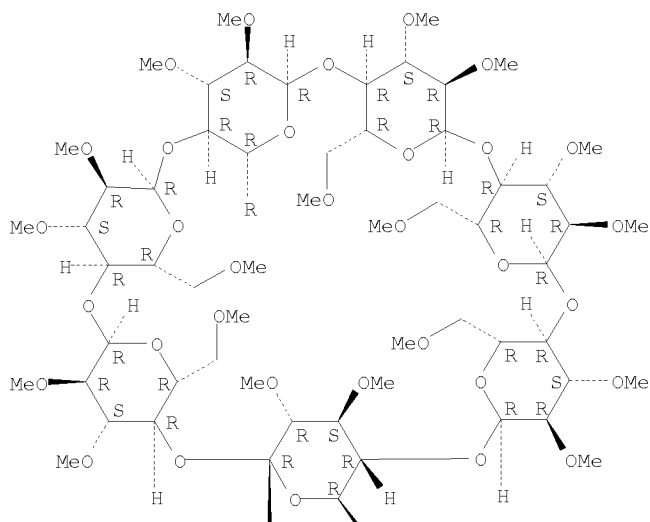


RN 1035018-11-1 CAPLUS

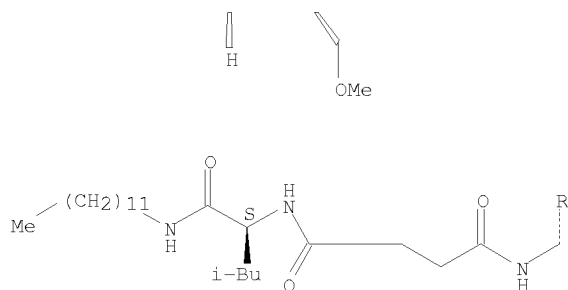
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(dodecylamino)carbonyl]-3-methylbutyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D IBIB AB HITSTR 4-61

L8 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:232008 CAPLUS

DOCUMENT NUMBER: 148:449892

TITLE: New glycosidic derivatives of histidine-containing dipeptides with antioxidant properties and resistant to carnosinase activity

AUTHOR(S): Bellia, Francesco; Amorini, Angela Maria; La Mendola, Diego; Vecchio, Graziella; Tavazzi, Barbara; Giardina, Bruno; Di Pietro, Valentina; Lazzarino, Giuseppe; Rizzarelli, Enrico

CORPORATE SOURCE: Department of Chemical Sciences, University of Catania, Catania, 95125, Italy

SOURCE: European Journal of Medicinal Chemistry (2008), 43(2), 373-380

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Elsevier Masson SAS

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:449892

AB Synthesis, antioxidant properties and resistance to carnosinase hydrolysis of histidine-containing dipeptides are reported in this study. Carnosine ( $\beta$ -alanyl-L-histidine), homocarnosine ( $\gamma$ -aminobutyryl-L-histidine) and anserine

( $\beta$ -alanyl-3-methyl-L-histidine) were covalently derivatized with  $\beta$ - cyclodextrin to form different OH- or NH-bound conjugates. Mass spectroscopic and  $^1\text{H}$  NMR data were used to determine the structure and the purity of the various  $\beta$ - cyclodextrin derivs. The inhibitory effect towards oxidation of human LDL induced by  $\text{Cu}^{2+}$  ions, was estimated by measuring malondialdehyde formation as a function of increasing concns. of these newly synthesized compds. (the  $\beta$ - cyclodextrin-anserine conjugated in 3 had the highest antioxidant effect). All derivs. had higher antioxidant effects than those of the corresponding free histidine-containing dipeptides. Resistance to rat brain carnosinase hydrolysis of the most active derivs. indicated that these compds. are good candidates for further studies in more complex cellular and animal models. Their possible applications for remedies in neurodegenerative disorders, such as Alzheimer's and Parkinson's diseases, are discussed.

IT **393100-96-4 929220-00-8**

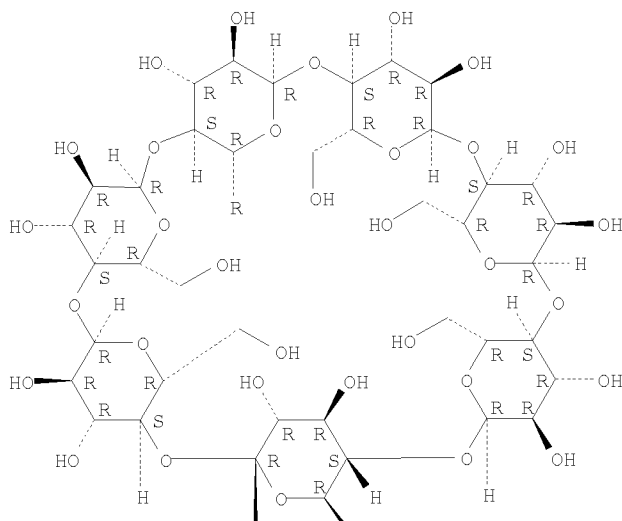
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of  $\beta$ - cyclodextrin derivs. of histidine-containing dipeptides and evaluation of their antioxidant properties and their resistance to carnosinase hydrolysis)

RN 393100-96-4 CAPLUS

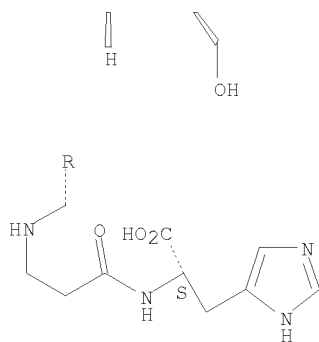
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



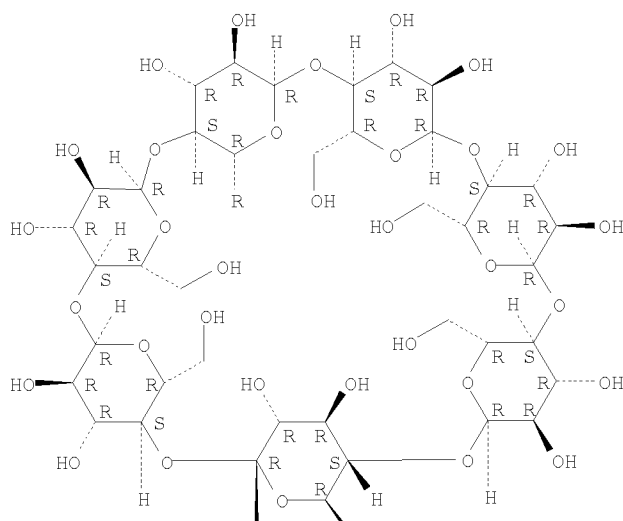
RN 929220-00-8 CAPLUS

CN L-Histidine, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1-oxobutyl]-

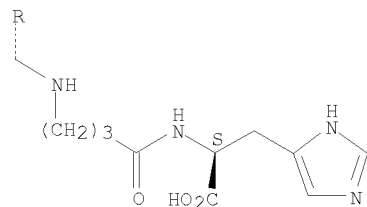
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

IT **1018683-11-8P**

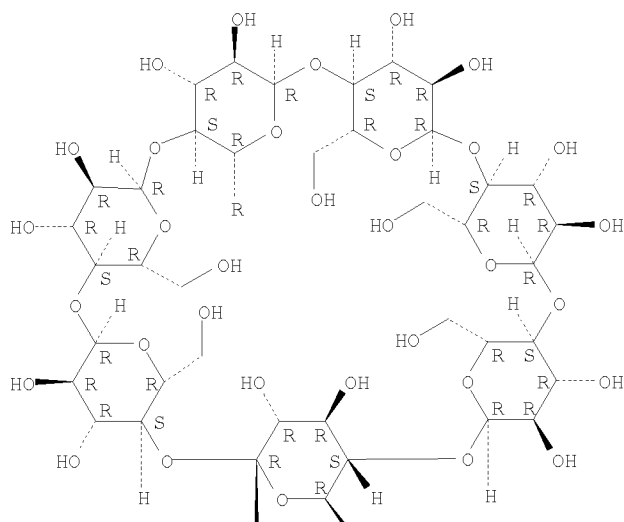
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (preparation of  $\beta$ - cyclodextrin derivs. of histidine-containing  
 dipeptides and evaluation of their antioxidant properties and their  
 resistance to carnosinase hydrolysis)

RN 1018683-11-8 CAPLUS

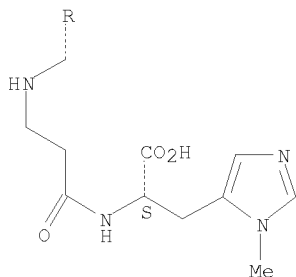
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl-3-methyl-  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:74777 CAPLUS

DOCUMENT NUMBER: 148:396582

TITLE: Lipid lateral segregation driven by diacyl  
cyclodextrin interactions at the membrane  
surface. [Erratum to document cited in CA147:442329]

AUTHOR(S): Roux, Michel; Moutard, Stephane; Perly, Bruno;  
Djedaini-Pilard, Florence

CORPORATE SOURCE: Commissariat a l'Energie Atomique/Direction des  
Sciences du Vivant/Institut de Biologie et  
Technologies de Saclay, Service de Bioenergetique,  
Biologie Structurale et Mecanismes, URA Centre  
National de la Recherche Scientifique 2096,  
Gif-sur-Yvette, F-91191, Fr.

SOURCE: Biophysical Journal (2008), 94(2), 715  
CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB On page 1620, in the sixth line of the Abstract, the volume number in the reference

citation should be "82" not "8". Also, Reference 14 was incorrect; The correct refs. are provided.

IT **850342-08-4 850342-12-0 850342-14-2**

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

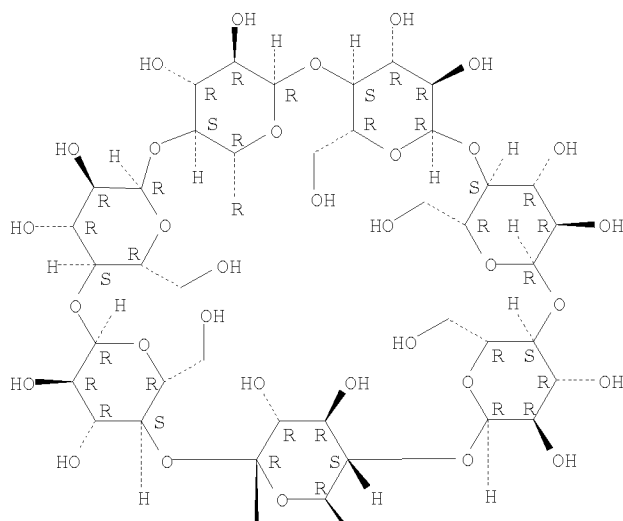
(lipid lateral segregation driven by diacyl cyclodextrin interactions at the membrane surface (Erratum))

RN 850342-08-4 CAPLUS

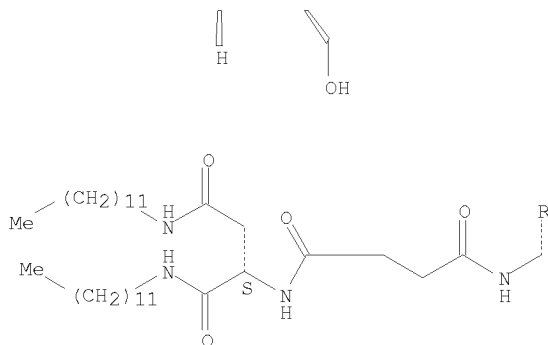
CN  **$\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-** (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



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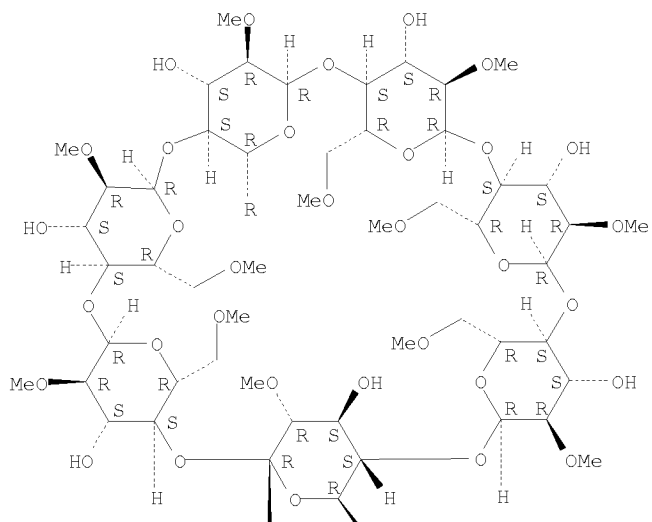


RN 850342-12-0 CAPLUS

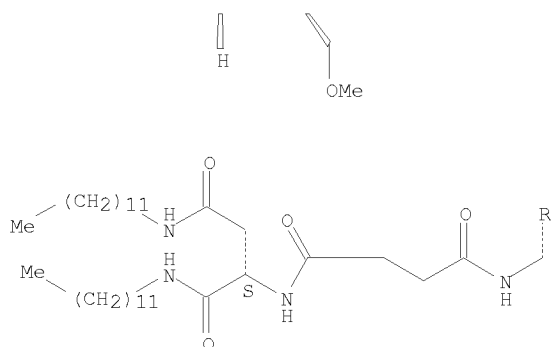
CN  **$\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-** 2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 2-A

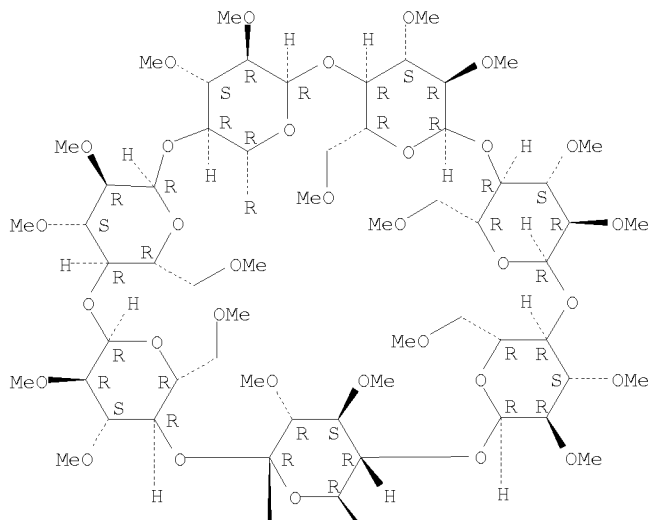


RN 850342-14-2 CAPLUS

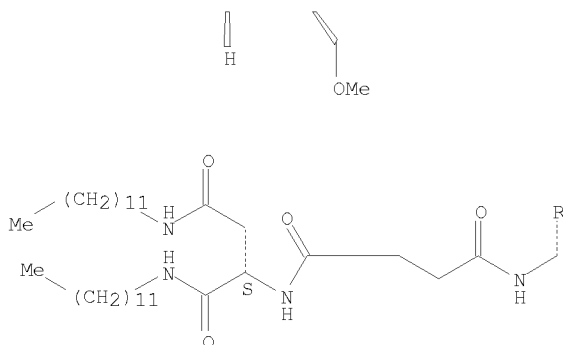
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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L8 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:965747 CAPLUS

DOCUMENT NUMBER: 147:486611

TITLE: Cerium complexes of cyclodextrin dimers as efficient catalysts for luminol chemiluminescence reactions

AUTHOR(S): Yuan, De-Qi; Lu, Jianzhong; Atsumi, Masato; Yan, Jia-Ming; Kai, Masaaki; Fujita, Kahee

CORPORATE SOURCE: Department of Molecular Medicinal Sciences, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, 852-8521, Japan

SOURCE: Organic &amp; Biomolecular Chemistry (2007), 5(18), 2932-2939

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:486611

AB The chemiluminescence of a luminol-H<sub>2</sub>O<sub>2</sub> system is found to be remarkably enhanced by the Ce(IV) complexes of EDTA-bridged cyclodextrin dimers. The dimers were proved to work much more efficiently than the corresponding monomer. The cavity shape of cyclodextrin moieties and their cooperation displayed an important role in amplifying the chemiluminescence. Further modification of either the cyclodextrin rims or the EDTA linker altered significantly the catalytic abilities of the cyclodextrin dimers, and the examination

of the effect of substituents on the chemiluminescence outputs suggested that the proximity between the **cyclodextrin** cavity and the metallic center might account for the amelioration of the chemiluminescence output.

IT **432023-87-5D**, cerium complexes **954378-13-3D**, cerium complexes **954378-16-6D**, cerium complexes **954378-17-7D**, cerium complexes **954378-20-2D**, cerium complexes **954378-21-3D**, cerium complexes

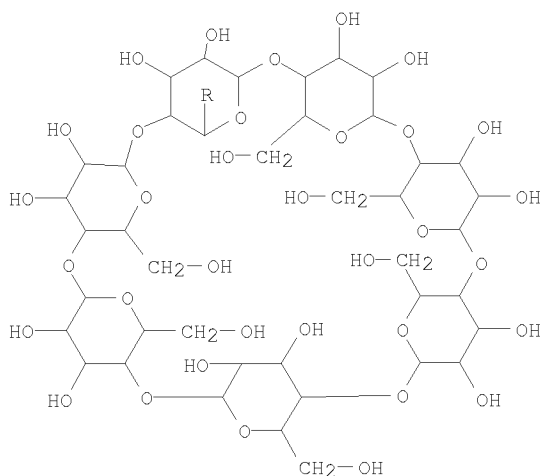
RL: PRP (Properties)

(preparation of **cyclodextrin** dimer cerium complexes for use as catalysts in luminol chemiluminescence reactions)

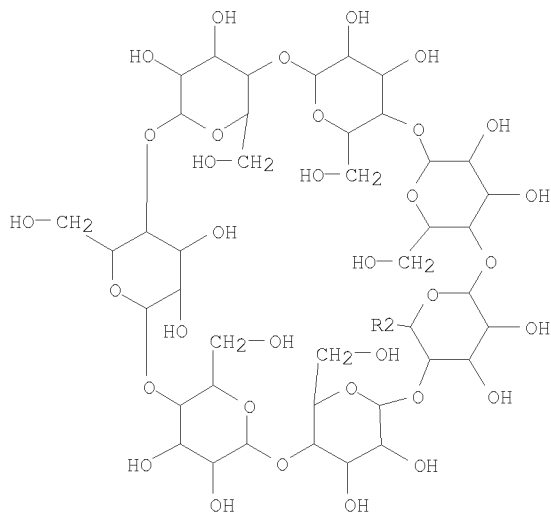
RN 432023-87-5 CAPLUS

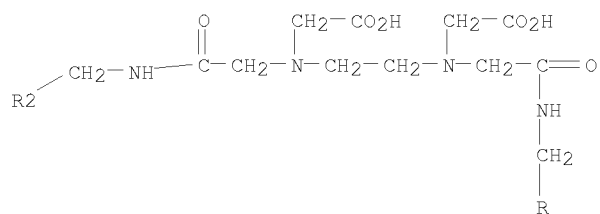
CN  **$\beta$ -Cyclodextrin**, 6A,6'A-[1,2-ethanediylbis[[[carboxymethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

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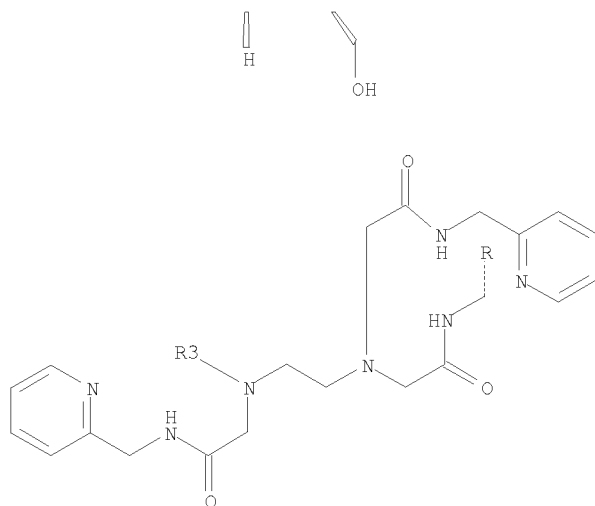
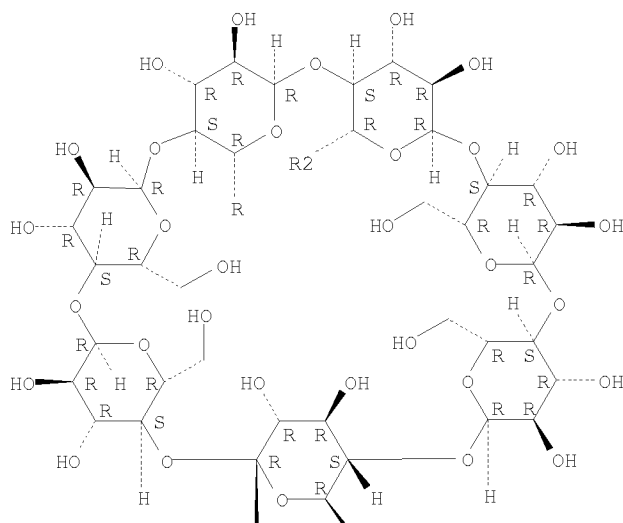




RN 954378-13-3 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-[(2-pyridinylmethyl)amino]ethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

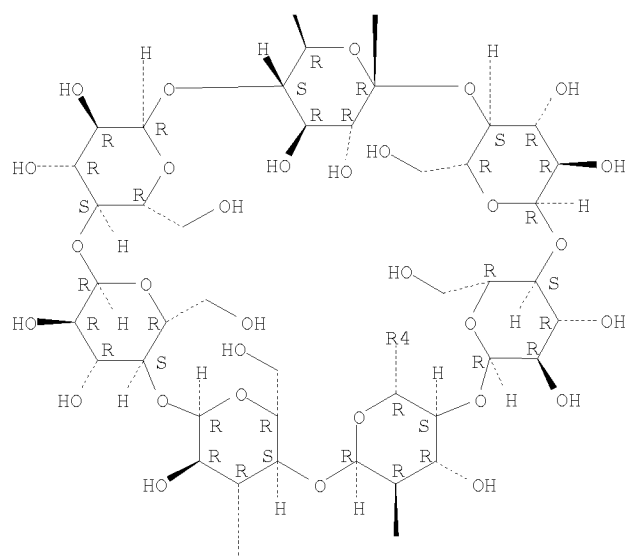
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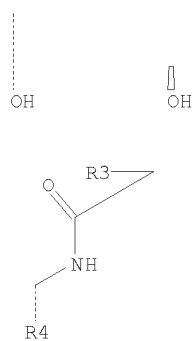


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PAGE 4-A



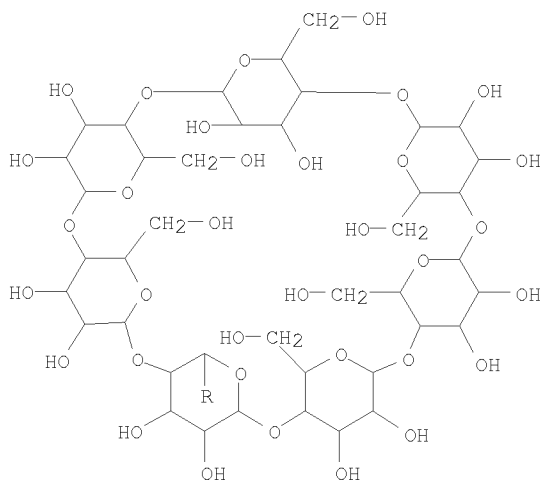


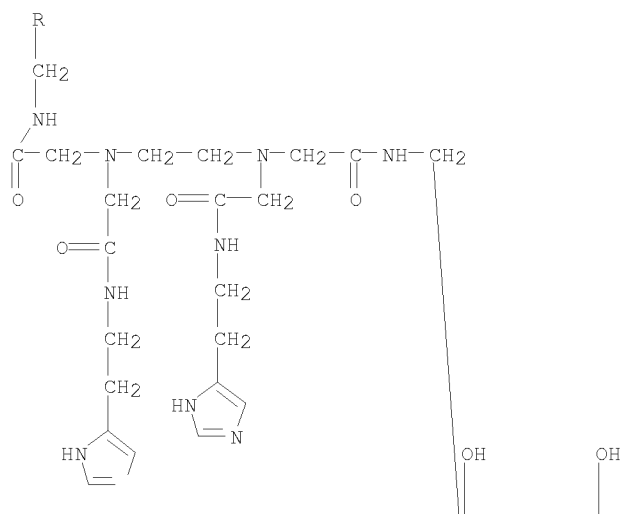
PAGE 5-A

RN 954378-16-6 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-oxoethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-(CA INDEX NAME)]

PAGE 1-A

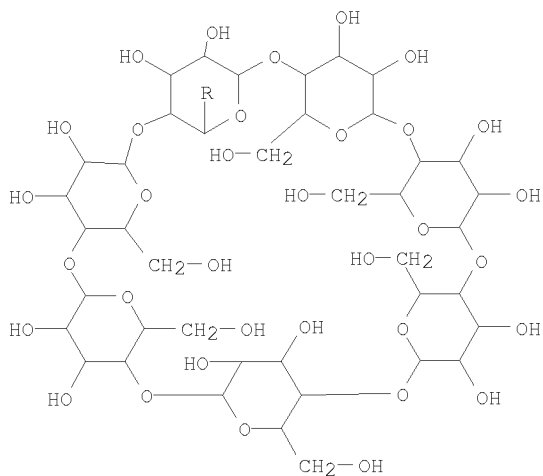




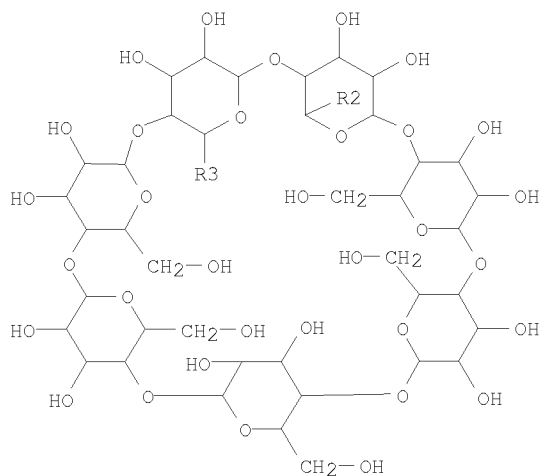
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RN 954378-17-7 CAPLUS

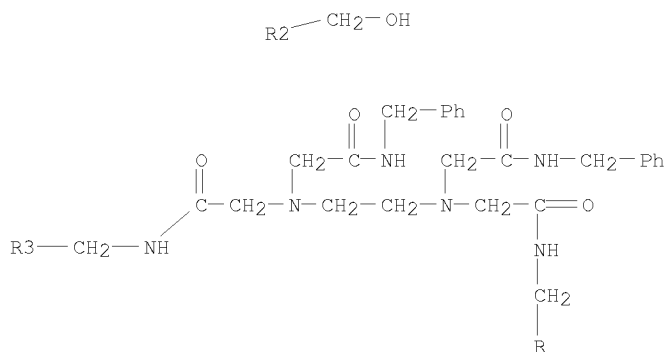
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[(phenylmethyl)amino]ethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-  
(CA INDEX NAME)]



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RN 954378-20-2 CAPLUS

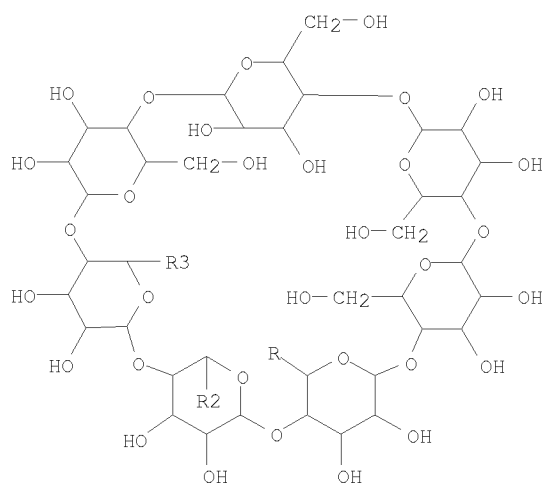
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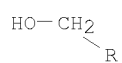
RN 954378-21-3 CAPLUS

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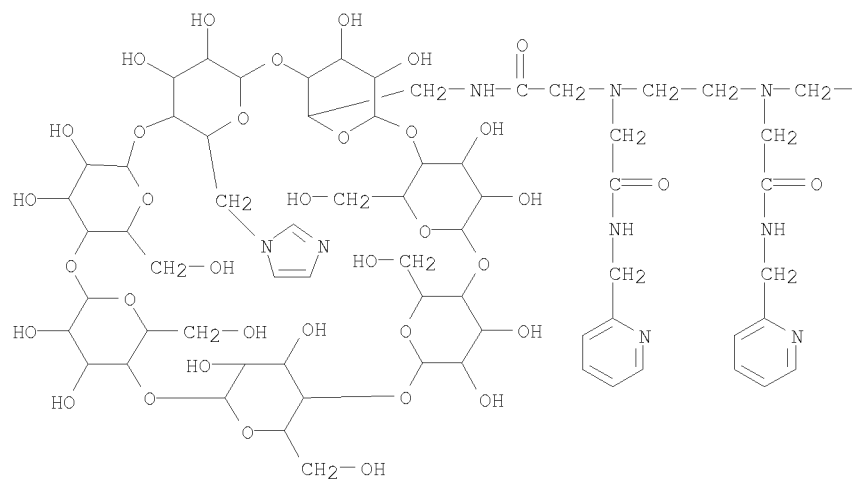
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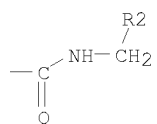
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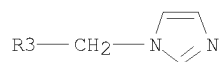
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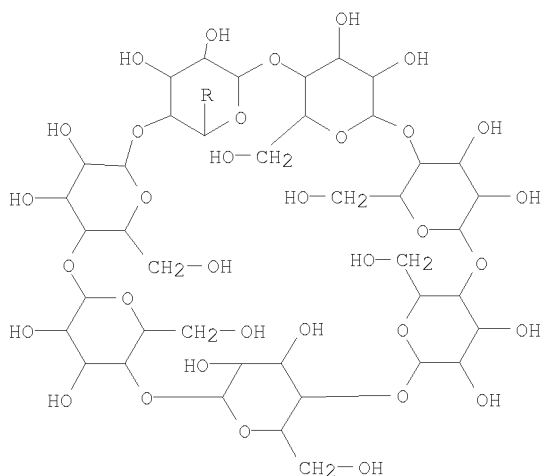
IT **432023-87-5**

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
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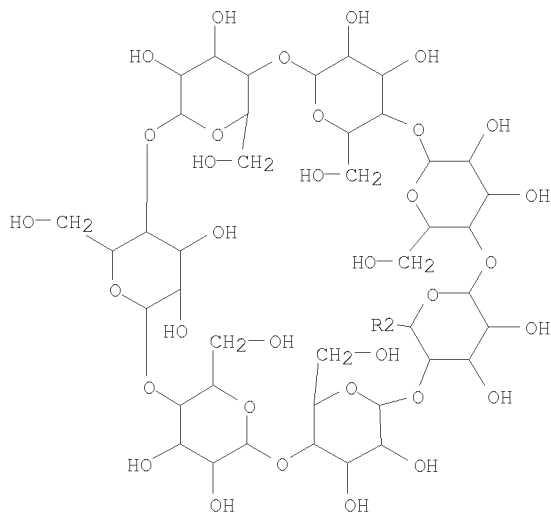
RN 432023-87-5 CAPLUS

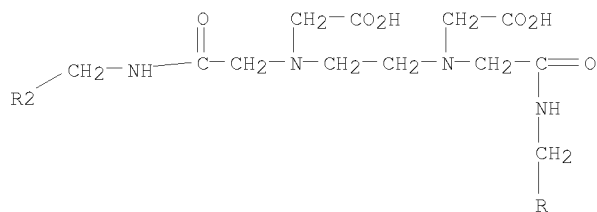
CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[carboxymethyl]imino](1-  
 oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

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IT **432023-89-7P** **954378-13-3P** **954378-16-6P**  
**954378-17-7P** **954378-21-3P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of **cyclodextrin** dimer cerium complexes for use as  
 catalysts in luminol chemiluminescence reactions)

RN 432023-89-7 CAPLUS

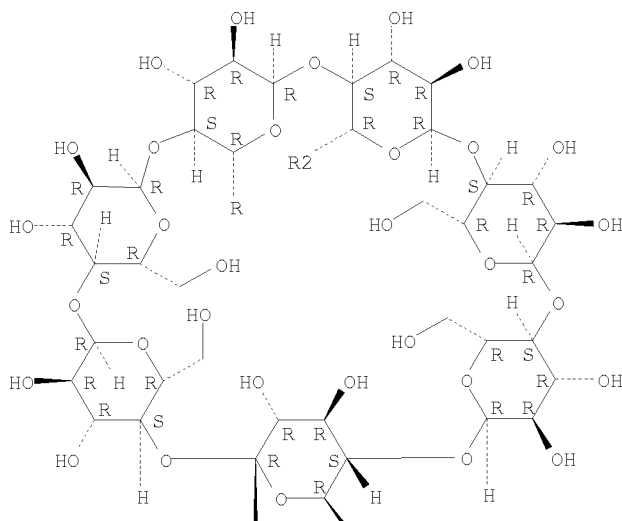
CN  **$\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[ (carboxymethyl)imino] (1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (CA INDEX NAME)**

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

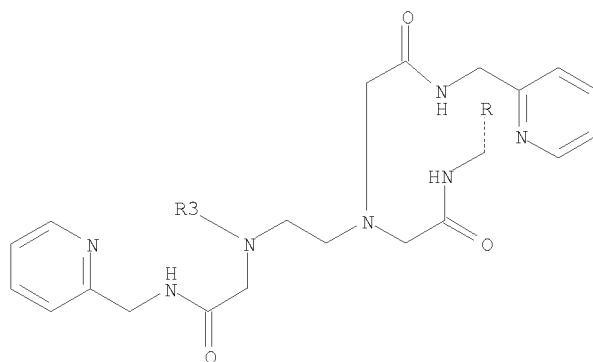
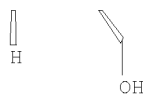
RN 954378-13-3 CAPLUS

CN  **$\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-[(2-pyridinylmethyl)amino]ethyl]imino] (1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)**

Absolute stereochemistry.

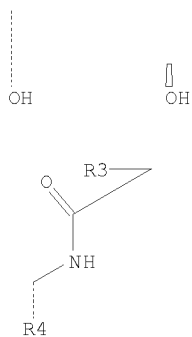
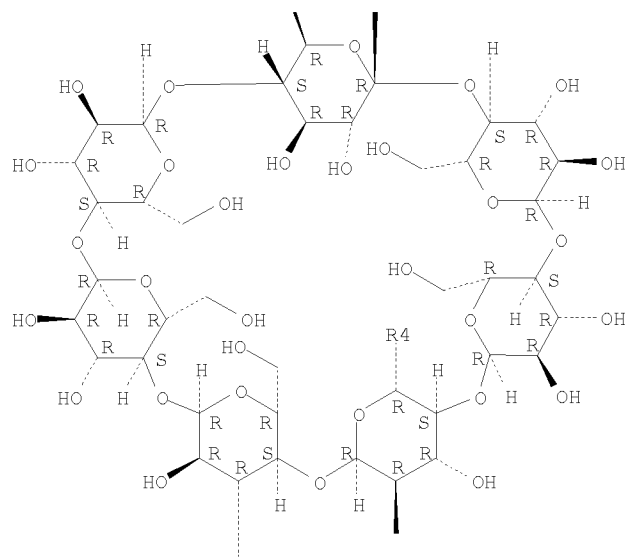


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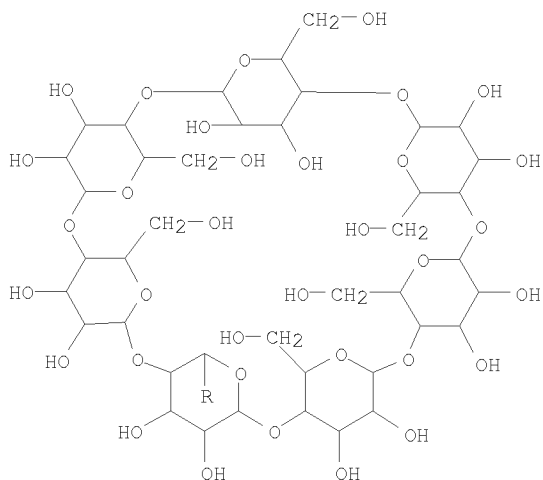




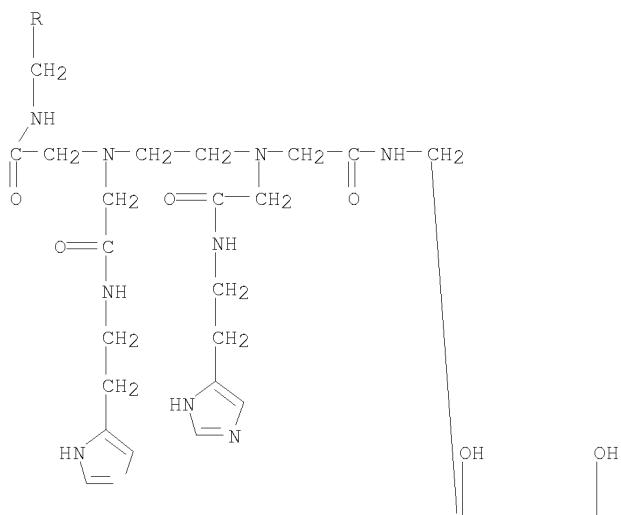
RN 954378-16-6 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[2-[[2-(1H-imidazol-4-yl)ethyl]amino]-2-oxoethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-  
(CA INDEX NAME)

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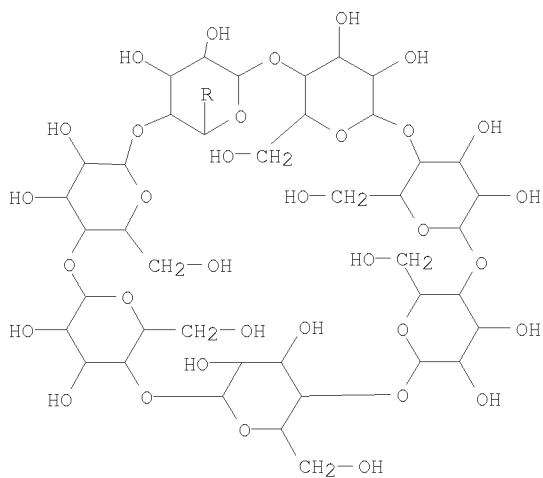


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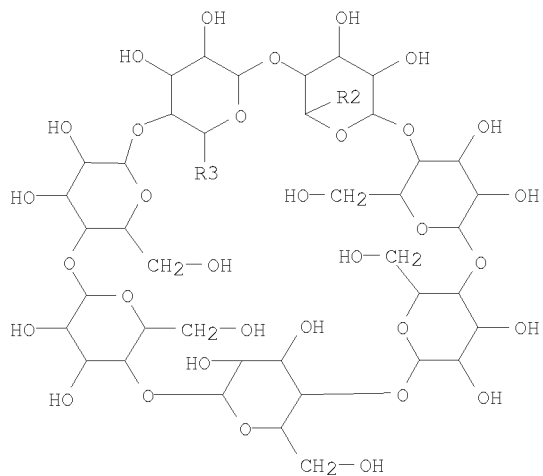
RN 954378-17-7 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[2-oxo-2-  
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(CA INDEX NAME)

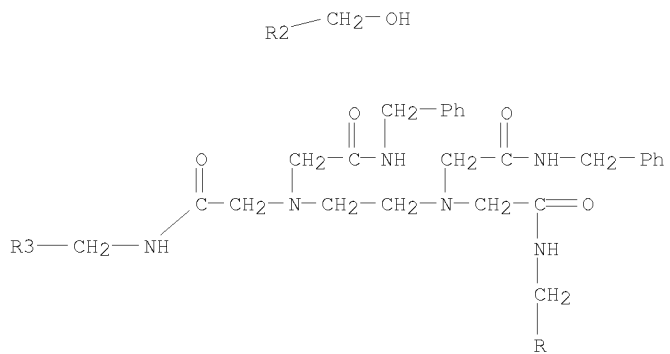
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PAGE 2-A

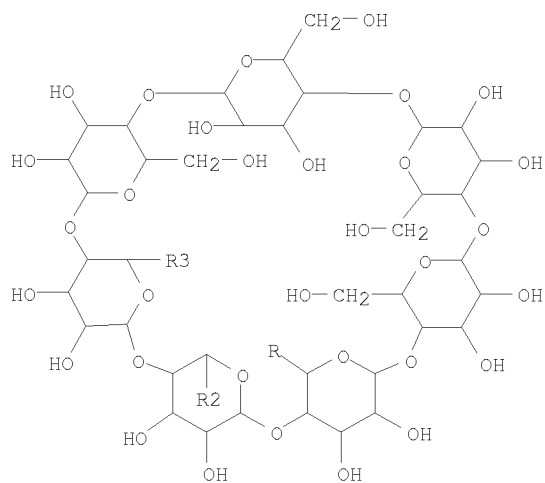


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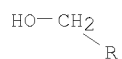


pyridinylmethyl)amino]ethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A,6B-dideoxy-6B-(1H-imidazol-1-yl)- (CA INDEX NAME)

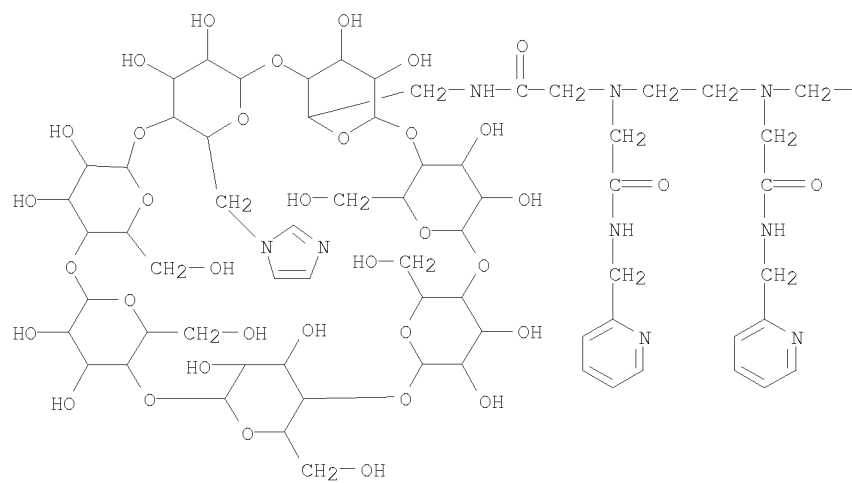
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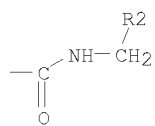
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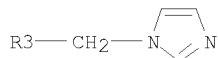


PAGE 3-A



PAGE 3-B





IT **954378-20-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclodextrin dimer cerium complexes for use as catalysts in luminol chemiluminescence reactions)

RN 954378-20-2 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[carboxymethyl]imino](1-oxo-2,1-ethanediyl)imino]]bis[6A,6B-dideoxy-6B-(1H-imidazol-1-yl)- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:946118 CAPLUS

DOCUMENT NUMBER: 147:442329

TITLE: Lipid lateral segregation driven by diacyl cyclodextrin interactions at the membrane surface

AUTHOR(S): Roux, Michael; Moutard, Staphane; Perly, Bruno; Djedaini-Pilard, Florence

CORPORATE SOURCE: Commissariat a l'Energie Atomique/Direction des Sciences du Vivant/Institut de Biologie et Technologies de Saclay, Service de Bioenergetique, Biologie Structurale et Mecanismes, URA Centre National de la Recherche Scientifique 2096, Gif sur Yvette, F-91191, Fr.

SOURCE: Biophysical Journal (2007), 93(5), 1620-1629  
CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cyclodextrins are hydrophilic mol. cages with a hydrophobic interior allowing the inclusion of water-insol. drugs. Amphiphilic cyclodextrins obtained by appending a hydrophobic anchor were designed to improve the cell targeting of the drug-containing cavities through their liposome transportation in the organism. After insertion in model membranes, they were found to induce a lateral phase separation into a pure lipid phase and a fluid cyclodextrin-rich phase (LCD) with reduced acyl chain order parameters, as observed with a derivative containing a cholesterol anchor. We present another class of amphiphilic cyclodextrins obtained by grafting aspartic acid esterified by two lauryl chains on the oligosaccharide core via a succinyl spacer. The obtained dilauryl- $\beta$ - cyclodextrin ( $\beta$ DLC) was inserted in chain perdeuterated dimyristoylphosphatidylcholine (DMPC-d54) membranes and studied by deuterium NMR (2H-NMR). A laterally segregated mixed phase was found to sequester three times more lipids than the cholesteryl derivative (.apprx.4-5 lipids per monomer of  $\beta$ DLC), and a quasipure LCD phase could be obtained with a 20% molar concentration of  $\beta$ DLC. When cooled below the main fluid-to-gel transition of DMPC-d54 the  $\beta$ DLC-rich phase stays fluid, coexisting with pure lipid in the gel state, and exhibits a sharp transition to a gel phase with frozen DMPC acyl chains at 12.5°. No lateral phase separation was observed with partially or fully methylated  $\beta$ DLC, confirming that the stability of the segregated LCD phase was governed through hydrogen-bond-mediated intermol. interactions between cyclodextrin headgroups at the membrane surface. As opposed to native  $\beta$ DLC, the methylated derivs. were found to strongly increase the orientational order of DMPC acyl chains as the temperature reaches the membrane fluid-to-gel transition. The results are discussed in relation to the "anomalous swelling" of saturated phosphatidylcholine multilamellar membranes known to occur in the vicinity of the main fluid-to-gel transition.

IT **850342-08-4 850342-12-0 850342-14-2**

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(lipid lateral segregation driven by diacyl cyclodextrin

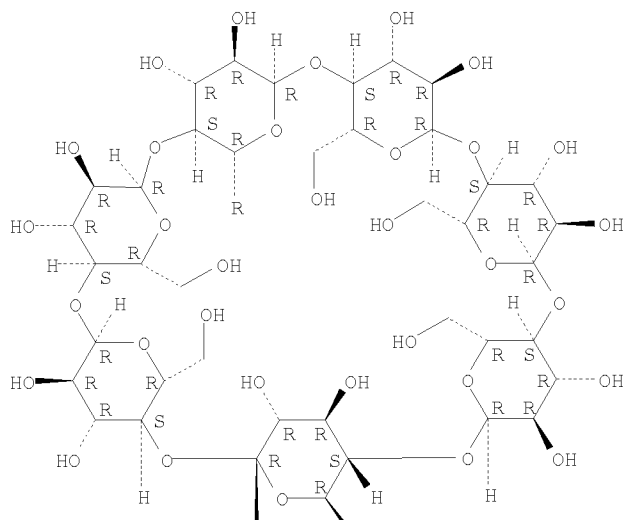
interactions at the membrane surface)

RN 850342-08-4 CAPLUS

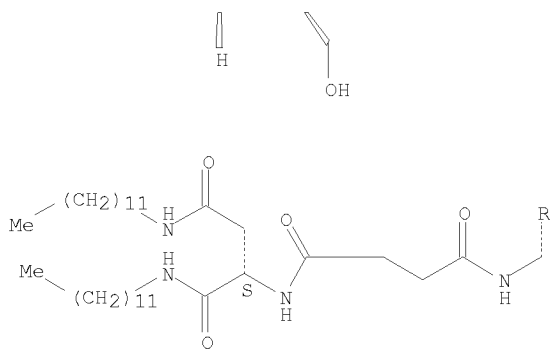
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-  
[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (CA  
INDEX NAME)

Absolute stereochemistry. Rotation (+).

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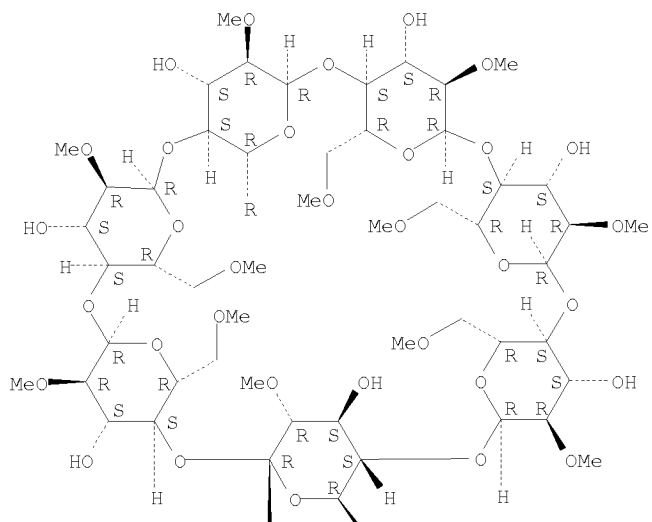


RN 850342-12-0 CAPLUS

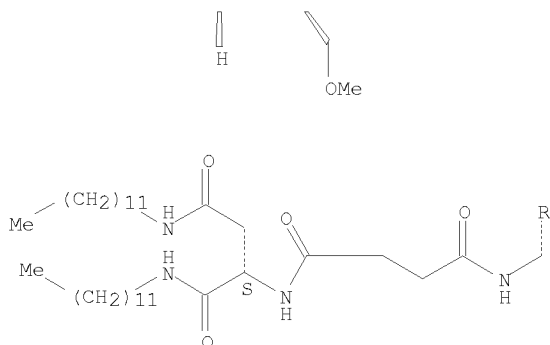
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-  
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2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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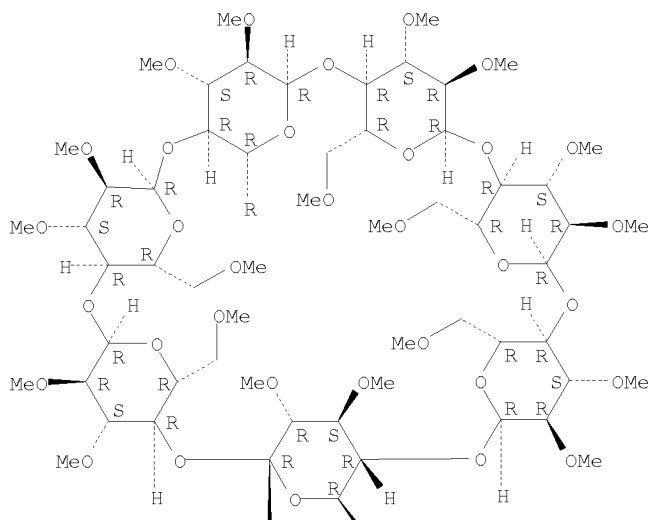


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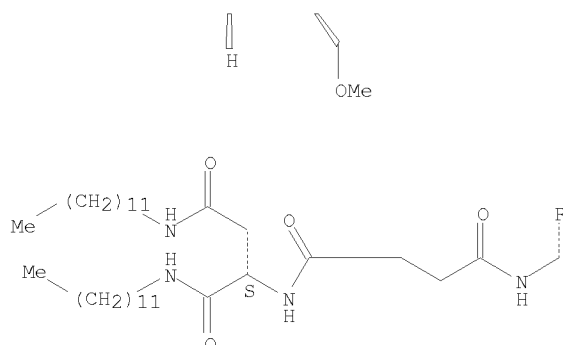
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (CA INDEX NAME)]

Absolute stereochemistry. Rotation (+).

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REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:706195 CAPLUS

DOCUMENT NUMBER: 147:118498

TITLE: Preparation of cyclodextrin-containing polymers, especially cyclodextrin-containing amino acid derivatives and peptides, and their uses for controlled release of bioactive molecules encapsulated within them

INVENTOR(S): Gnaim, Jallal M.

PATENT ASSIGNEE(S): Capsutech Ltd., Israel

SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007072481	A2	20070628	WO 2006-IL1459	20061219
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 US 2006-854074P P 20061025  
 WO 2006-IL1459 W 20061219

OTHER SOURCE(S): CASREACT 147:118498

AB The invention provides a cyclodextrin-containing polymer comprising one or more cyclodextrin residues, wherein the polymer is selected from a peptide, a polypeptide, an oligonucleotide or a polynucleotide or a mixture thereof, wherein the peptide or polypeptide has at least one amino acid residue containing a functional side group and at least one of the cyclodextrin residues is covalently linked to the functional side group of the amino acid residue of the peptide or polypeptide or to the sugar moiety of a nucleotide residue of the oligonucleotide or polynucleotide. The invention relates to compns. for controlled release of water-insol. or unstable drugs, odor and color agents encapsulated and/or entrapped within the cyclodextrin-containing polymer. Thus, homopolypeptide poly[mono-6-deoxy-6-(4-carboxy-4-aminobutyrylamino)- $\beta$ -cyclodextrin] was prepared in 3 steps by coupling mono-6-deoxy-6-amino- $\beta$ -cyclodextrin with Boc-NH-Glu(CO<sub>2</sub>H)-COOBz (Boc = tert-butoxycarbonyl, Bz = benzyl); cleavage of the Boc group, cleavage of the Bz group, and coupling of mono-6-deoxy-6-(4-carboxy-4-aminobutyrylamino)- $\beta$ -cyclodextrin using DCC and HOBT in DMF. A general procedure for the encapsulation of thymol and vitamin E by a cyclodextrin-containing a dipeptide is given.

IT 942936-98-3P 942936-99-4P

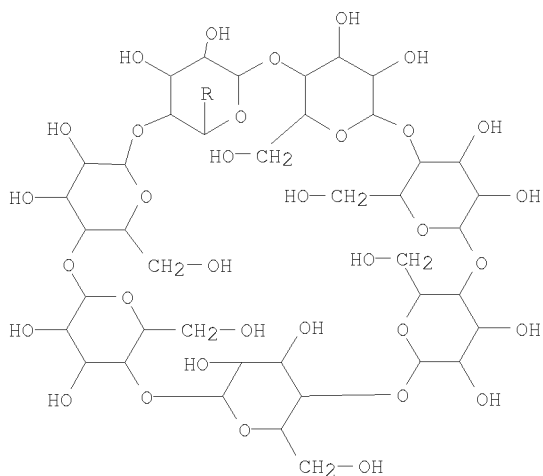
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclodextrin-containing amino acid derivs. and peptides and their uses for controlled release of bioactive mols. encapsulated within them)

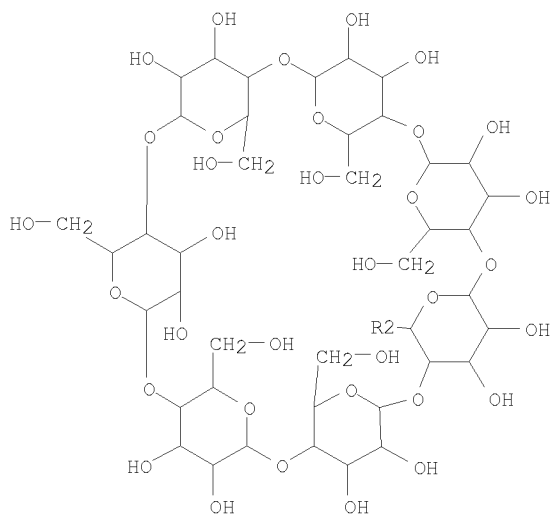
RN 942936-98-3 CAPLUS

CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-N<sub>2</sub>-[(1,1-dimethylethoxy)carbonyl]-L-glutaminy-L-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-, phenylmethyl ester (CA INDEX NAME)

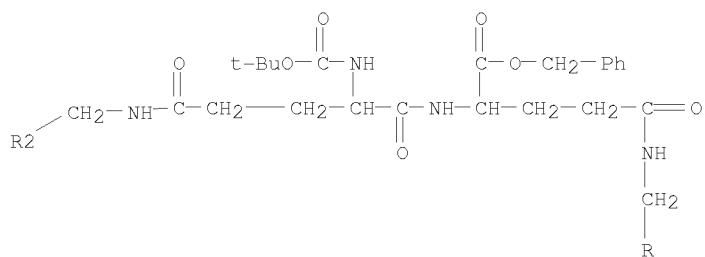
PAGE 1-A



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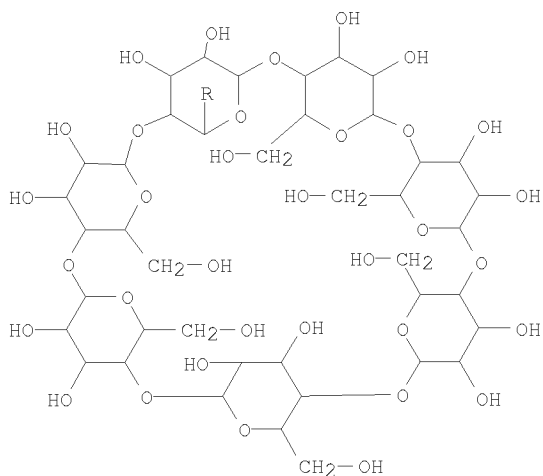


PAGE 3-A

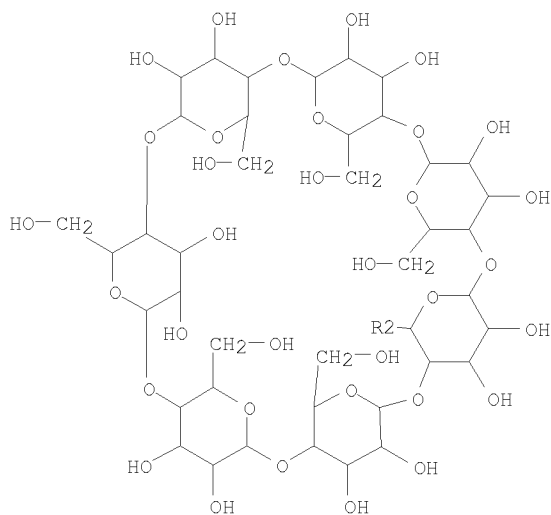


RN 942936-99-4 CAPLUS  
 CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (CA INDEX NAME)

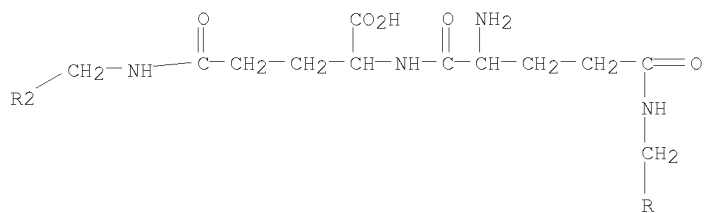
PAGE 1-A



PAGE 2-A



PAGE 3-A

IT **942936-96-1P 942936-97-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of cyclodextrin-containing amino acid derivs. and  
 peptides and their uses for controlled release of bioactive mols.  
 encapsulated within them)

RN 942936-96-1 CAPLUS

10576346

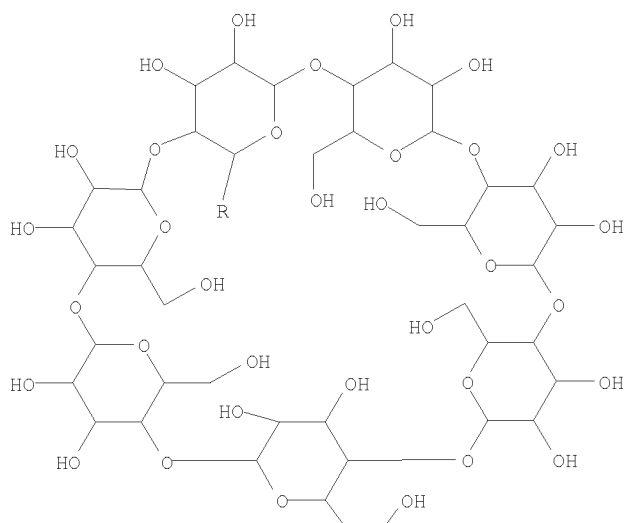
CN  $\beta$ -Cyclodextrin, 6A,6'A-[[ (2S)-2-[[ (1,1-dimethylethoxy) carbonyl] amino]-1,5-dioxo-1,5-pentanediy]bis(imino-2,1-ethanediylimino)]bis[6A-deoxy- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 942936-97-2 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[[ (2S)-2-amino-1,5-dioxo-1,5-pentanediy]bis(imino-2,1-ethanediylimino)]bis[6A-deoxy- (CA INDEX NAME)

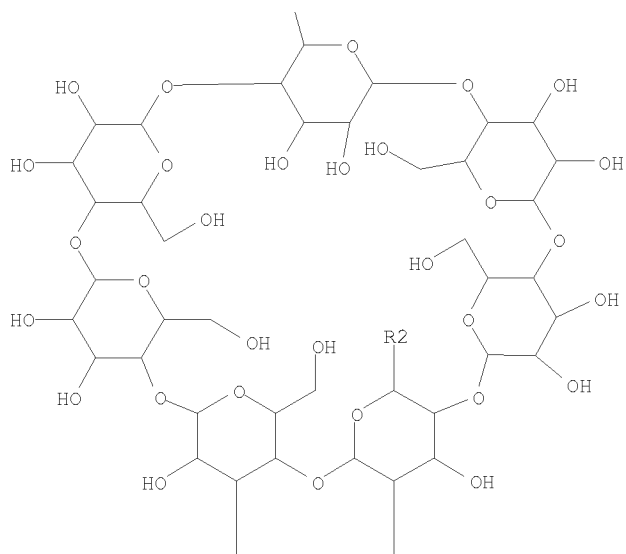
PAGE 1-A



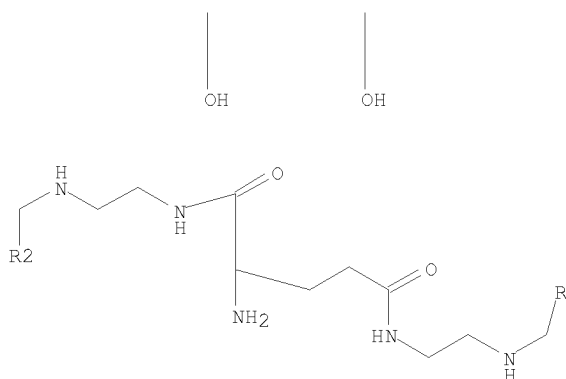
PAGE 2-A



PAGE 3-A



PAGE 4-A

IT **942937-00-0P 942937-01-1P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(use of cyclodextrin-peptides for controlled release of bioactive mols. encapsulated within them)

RN 942937-00-0 CAPLUS

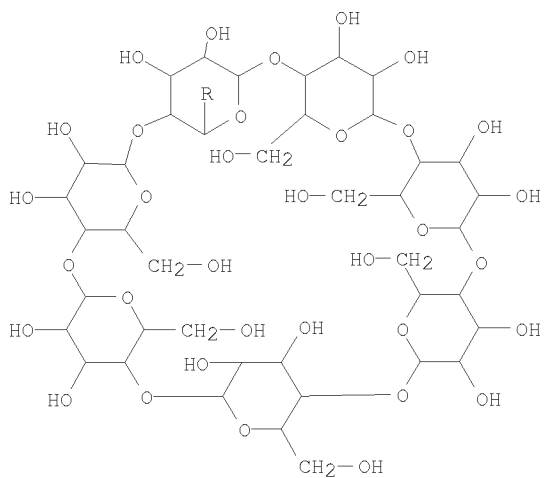
CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-, compd. with 5-methyl-2-(1-methylethyl)phenol (1:?) (CA INDEX NAME)

CM 1

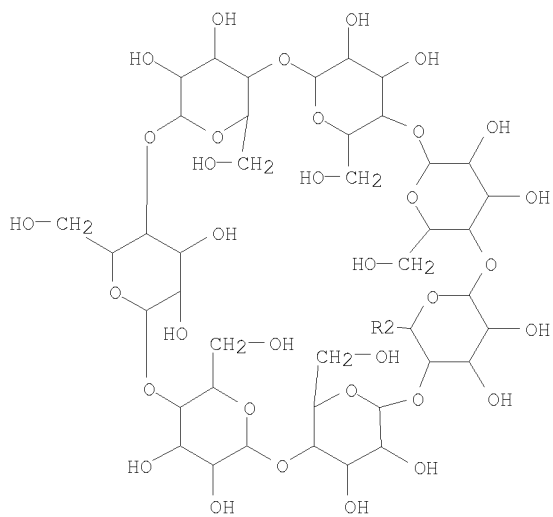
CRN 942936-99-4

CMF C94 H154 N4 O73

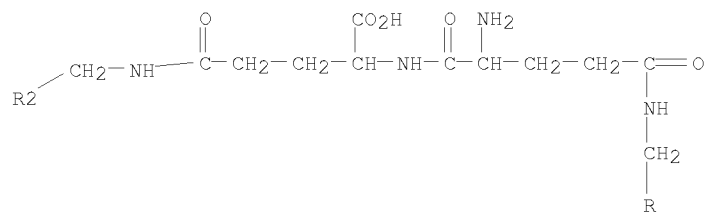
PAGE 1-A



PAGE 2-A

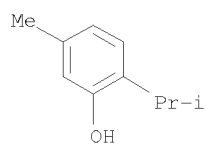


PAGE 3-A



CM 2

CRN 89-83-8  
 CMF C10 H14 O



RN 942937-01-1 CAPLUS

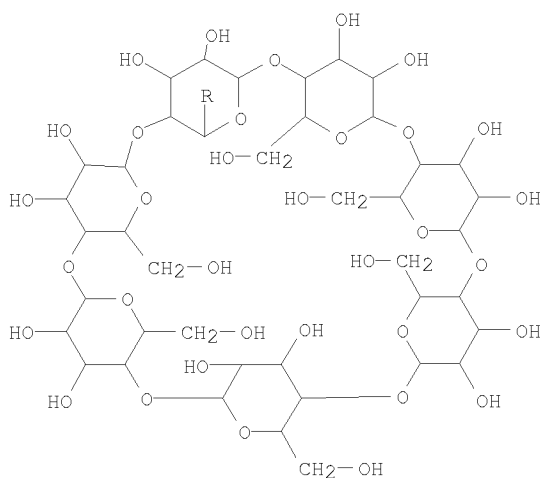
CN L-Glutamine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-, compd. with vitamin E (1:?) (CA INDEX NAME)

CM 1

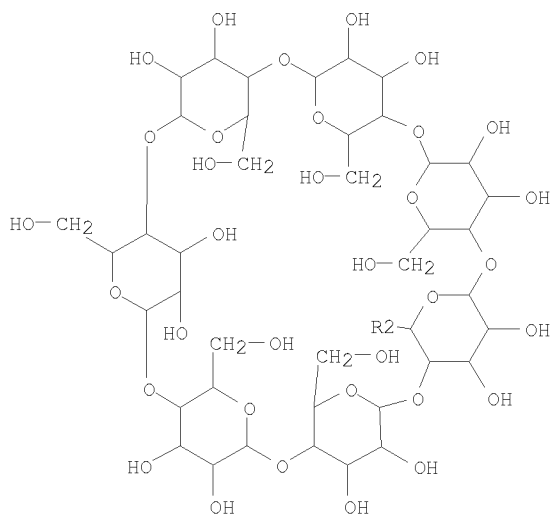
CRN 942936-99-4

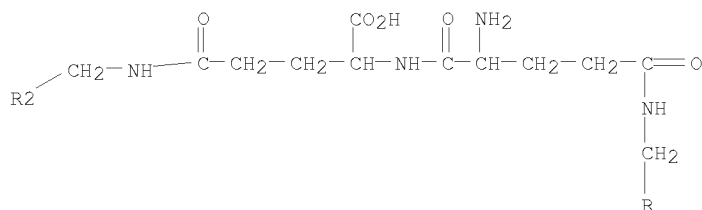
CMF C94 H154 N4 O73

PAGE 1-A



PAGE 2-A





CRN 1406-18-4  
CMF Unspecified  
CCT MAN

L8 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

DOCUMENT NUMBER: 147:258022

AUTHOR(S) : Amorini, Angela Maria; Bellia, Francesco; Di Pietro, Valentina; Giardina, Bruno; La Mendola, Diego; Lazzarino, Giuseppe; Sortino, Salvatore; Tavazzi, Barbara; Rizzarelli, Enrico; Vecchio, Graziella

SOURCE: European Journal of Medicinal Chemistry (2007), 42(7), 910-920

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Elsevier Masson SAS

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S) : CASREACT 147:258022

AB Several in vitro and in vivo studies have suggested that carnosine, H<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>CO-His-OH, and homocarnosine, H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>CO-His-OH, can act as scavengers of reactive oxygen species. β- Cyclodextrin was functionalized with homocarnosine, obtaining the following new bioconjugate isomers: 6A-[(4-([[(1S)-1-carboxy-2-(1H-imidazol-4-yl)ethyl]amino]-4-oxobutyl)amino]-6A-deoxy-β- cyclodextrin and (2AS,3AR)-3A-[(4-([[(1S)-1-carboxy-2-(1H-imidazol-4-yl)ethyl]amino)-4-oxobutyl]amino]-3A-deoxy-β- cyclodextrin. Pulse radiolysis investigations show that the β- cyclodextrin homocarnosine bioconjugates are scavengers of hydroxyl radicals because of the formation of stable imidazole-centered radicals and the scavenger ability of glucose mols. of the macrocycle. The ability of these new β- cyclodextrin derivs. to inhibit the copper(II)-driven LDL oxidation was determined in comparison with that displayed by the analogous carnosine derivs. Both β- cyclodextrin carnosine isomers show a higher protective effect than that of free dipeptide and homocarnosine derivs., bringing into light the role of the β-CD cavity.

IT 393100-96-4

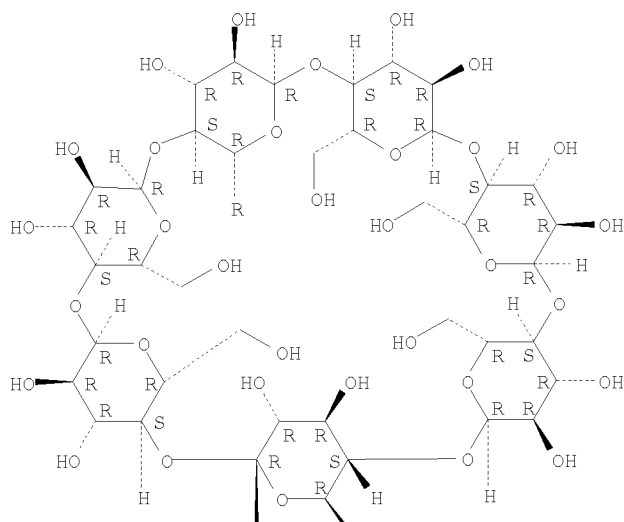
RL: PAC (Pharmacological activity); BIOL (Biological study)  
(biol. activity as inhibitors of Cu(II)-driven LDL oxidation)

RN 393100-96-4 CAPLUS

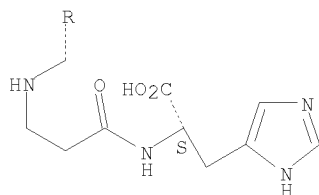
CN L-Histidine, N-(6A-deoxy-β-cyclodextrin-6A-yl)-β-alanyl- (CA  
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

IT **929220-00-8P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

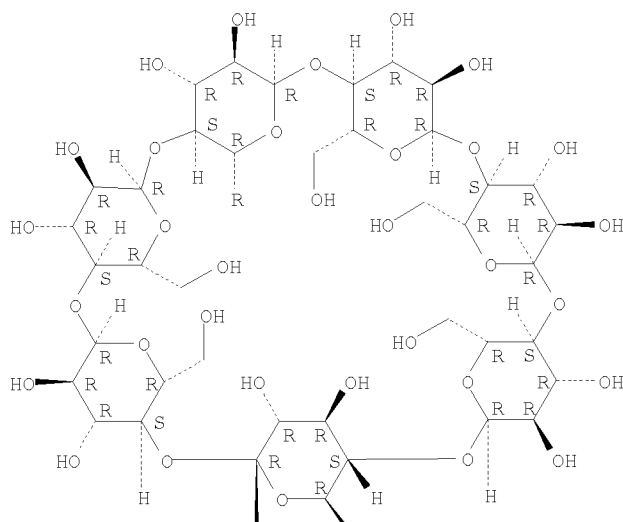
(preparation of homocarnosine  $\beta$ - **cyclodextrin** conjugates, and their biol. activity as scavengers of hydroxyl radicals and as inhibitors of Cu(II)-driven LDL oxidation)

RN 929220-00-8 CAPLUS

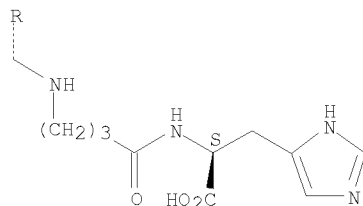
CN L-Histidine, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1-oxobutyl]-  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:441340 CAPLUS

DOCUMENT NUMBER: 147:66253

TITLE: A synthetic supramolecular construct modulating protein assembly in cells

AUTHOR(S): Zhang, Li; Wu, Yaowen; Brunsveld, Luc

CORPORATE SOURCE: Max-Planck-Inst. Mol. Physiol., Dortmund, 44227, Germany

SOURCE: Angewandte Chemie, International Edition (2007), 46(11), 1798-1802

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:66253

AB Supramol. chemical in the cell: Synthetic supramol. constructs ligated to proteins modulate protein assembly. The interaction between the supramol. elements is operative both in vitro and in cells, and drives the proteins to assemble, as revealed by a strong FRET effect between the engineered proteins.

IT **941690-44-4DP**, conjugated with enhanced yellow fluorescent protein

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

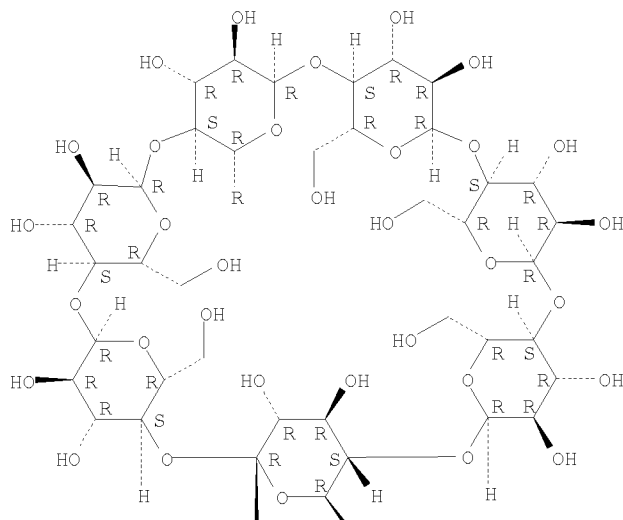
(synthetic supramol. construct modulating protein assembly in cells)

RN 941690-44-4 CAPLUS

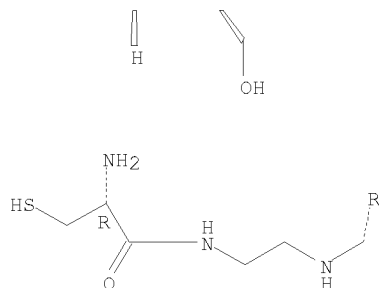
CN  $\beta$ -Cyclodextrin, 6A-[[2-[[[(2R)-2-amino-3-mercapto-1-oxopropyl]amino]ethyl]amino]-6A-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



IT **941690-43-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

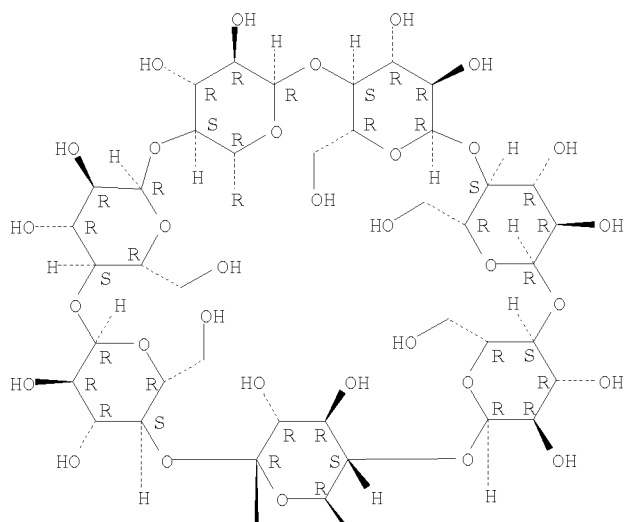
(synthetic supramol. construct modulating protein assembly in cells)

RN 941690-43-3 CAPLUS

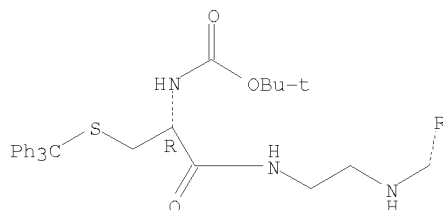
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[2-[[[(2R)-2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-[[triphenylmethyl]thio]propyl]amino]ethyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:369558 CAPLUS

DOCUMENT NUMBER: 148:379825

TITLE: Oligosaccharide tagged  $\beta$ - cyclodextrins: synthesis and biological affinity towards Concanavalin A

AUTHOR(S): Smiljanic, Nicolas; Moreau, Vincent; Yockot, Duplex; Garcia Fernandez, Jose Manuel; Djedaini-Pilard, Florence

CORPORATE SOURCE: Laboratoire des Glucides UMR 6219, Universite de Picardie Jules Verne, Amiens, 80039, Fr.

SOURCE: Journal of Inclusion Phenomena and Macrocyclic Chemistry (2007), 57(1-4), 9-14  
CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER: Springer

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An original synthetic route based on multi-glycosylation and selective protection-deprotection steps has been developed which allows a fast access to complex oligo-mannosides with both  $\alpha$ -(1,3),  $\alpha$ -(1,6) and  $\alpha$ -(1,3),  $\alpha$ -(1,4) cores. The later have been linked to modified  $\beta$ - cyclodextrins bearing spacing arms of varying chemical structure and length through peptidic-like coupling, leading to the

formation of a range of oligo-mannosyl **cyclodextrin** conjugates. Complexation studies with sodium anthraquinone-2-sulfonate (ASaNa) and sodium adamantane 1-carboxylate (ACNa) as guest mols. demonstrated that the  $\beta$ - **cyclodextrin** inclusion properties are preserved. Binding affinity studies using the mannose specific lectin Con A demonstrated the key role of the d. and tridimensional structure of the sugar ligand in recognition events.

IT **1013938-44-7d**, Con A bound

RL: BSU (Biological study, unclassified); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

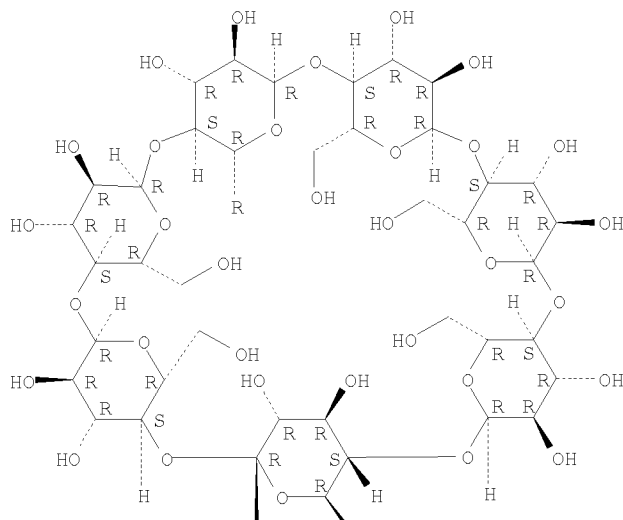
(oligosaccharide tagged  $\beta$ - **cyclodextrins** and synthesis and biol. affinity towards Con A)

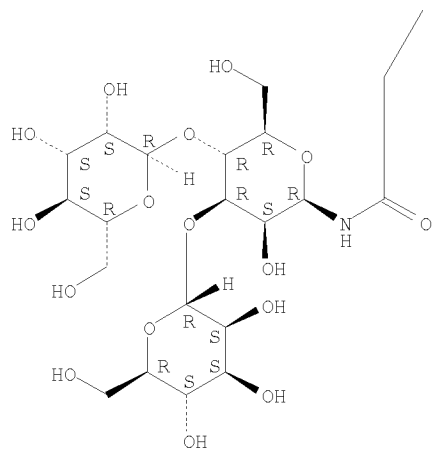
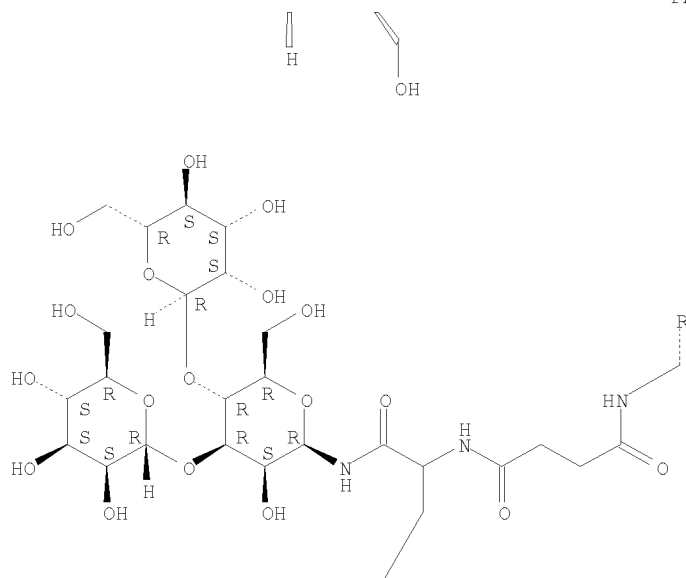
RN 1013938-44-7 CAPLUS

CN  **$\beta$ -Cyclodextrin**, 6A-deoxy-6A-[[4-[[4-[(O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-mannopyranosyl)amino]-1-[[ (O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-mannopyranosyl)amino]carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





IT **1013938-45-8 1013938-52-7**

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); FORM (Formation, nonpreparative); PROC (Process)  
(oligosaccharide tagged  $\beta$ - cyclodextrins and synthesis  
and biol. affinity towards Con A)

RN 1013938-45-8 CAPLUS

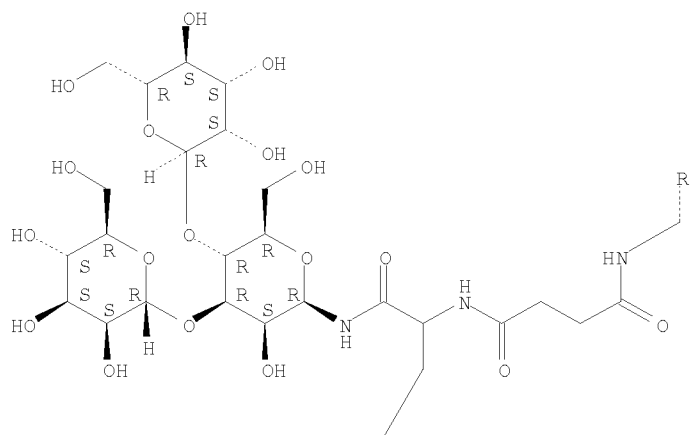
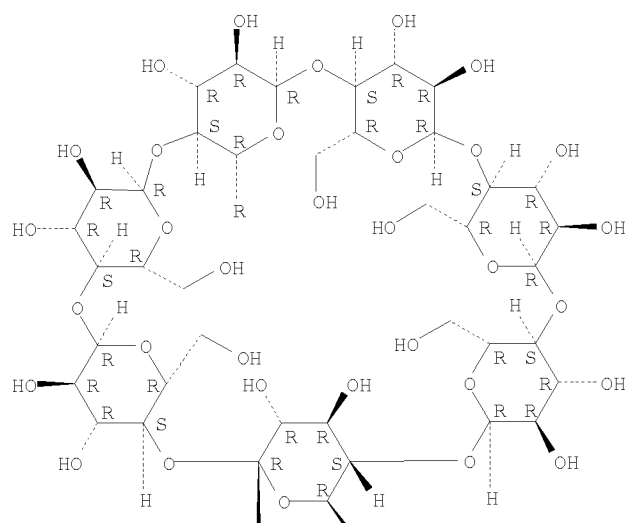
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[4-[(O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-mannopyranosyl]amino]-1-[[ (O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 4)]- $\beta$ -D-mannopyranosyl]amino]carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-, compd. with sodium tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylate (1:1:1) (CA INDEX NAME)

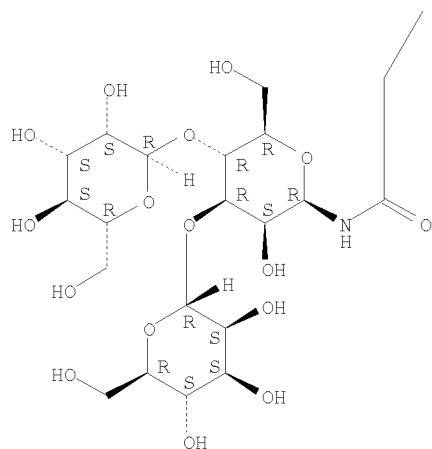
CM 1

CRN 1013938-44-7

CMF C87 H144 N4 O68

Absolute stereochemistry.

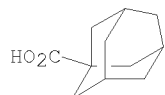




CM 2

CRN 40242-32-8

CMF C11 H16 O2 . Na



● Na

RN 1013938-52-7 CAPLUS  
 CN **β**-Cyclodextrin, 6A-deoxy-6A-[[4-[[4-[(O-**α**-D-mannopyranosyl-(1→3)-O-**α**-D-mannopyranosyl-(1→4)]-**β**-D-mannopyranosyl]amino]-1-[[ (O-**α**-D-mannopyranosyl-(1→3)-O-**α**-D-mannopyranosyl-(1→4)]-**β**-D-mannopyranosyl]amino]carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-, compd. with sodium 9,10-dihydro-9,10-dioxo-2-anthracenesulfonate (1:1:1)  
 (CA INDEX NAME)

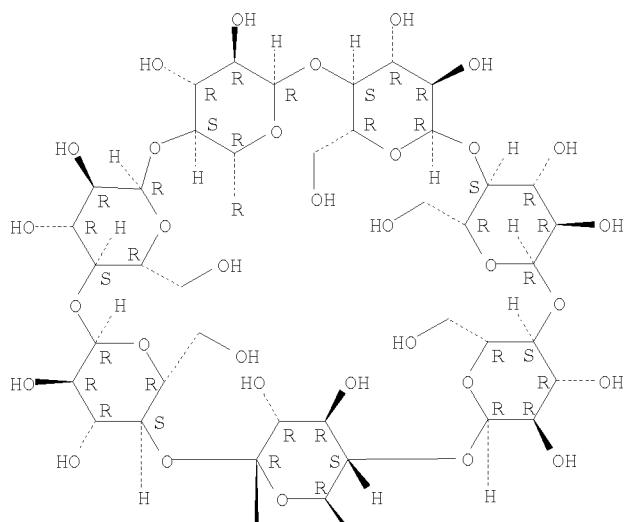
CM 1

CRN 1013938-44-7

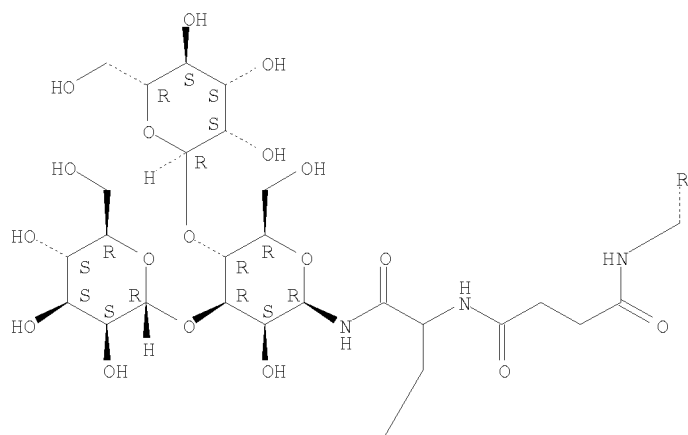
CMF C87 H144 N4 O68

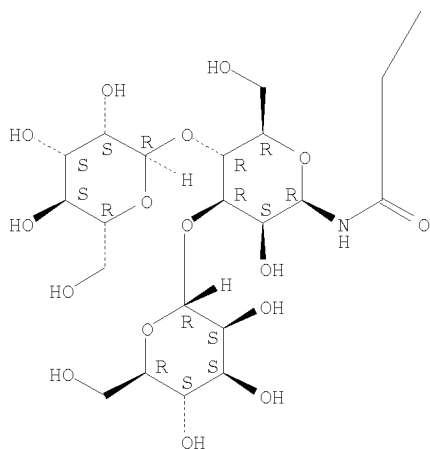
Absolute stereochemistry.

PAGE 1-A



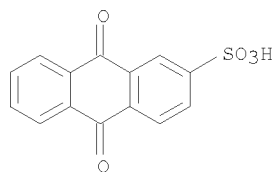
PAGE 2-A





CM 2

CRN 131-08-8  
CMF C14 H8 O5 S . Na



● Na

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:360774 CAPLUS

DOCUMENT NUMBER: 147:10107

TITLE: Efficient Use of Ellman Safety-Catch Linker for Solid-Phase Assisted Synthesis of Multivalent Glycoconjugates

AUTHOR(S): Diaz-Moscoso, Alejandro; Benito, Juan M.; Mellet, Carmen Ortiz; Fernandez, Jose M. Garcia

CORPORATE SOURCE: Instituto de Investigaciones Quimicas, CSIC, Seville, E-41092, Spain

SOURCE: Journal of Combinatorial Chemistry (2007), 9(3), 339-342

CODEN: JCCHFF; ISSN: 1520-4766

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:10107

AB A strategy that ensures high-yielding release of the glyco-ligands from the resin solid support in mild and chemoselective conditions, minimizing purification steps of the final adducts, taking advantage of the Ellman safety-catch linker principle, is reported. Furthermore, the resin-bound compds. can be released under very mild conditions using a two-step strategy involving (i) selective N-alkylation of the N-acyl-sulfonamide group and (ii) attack of a mild nucleophile, for instance an amine, to the N-alkyl- N-acyl-sulfonamide intermediate.

IT **937255-66-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

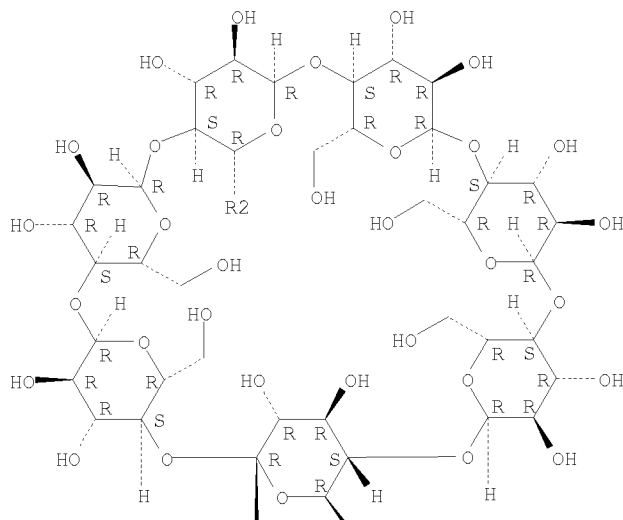
(use of Ellman safety-catch linker for solid-phase assisted synthesis  
of multivalent glycoconjugate dendrimers)

RN 937255-66-8 CAPLUS

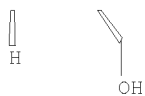
CN  $\beta$ -Cyclodextrin, 6A-[[N,N-bis[2-[[[2-( $\alpha$ -D-mannopyranosyloxy)-  
1,1-bis[( $\alpha$ -D-mannopyranosyloxy)methyl]ethyl]amino]carbonyl]amino]eth  
yl]glycylglycyl]amino]-6A-deoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

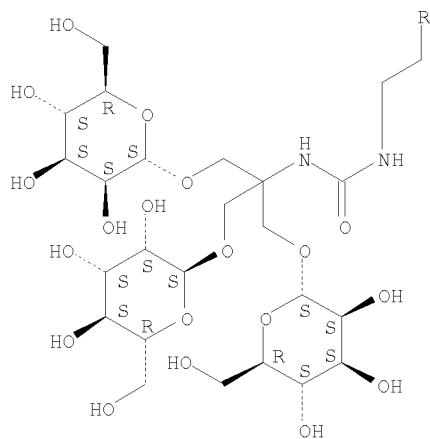
PAGE 1-A

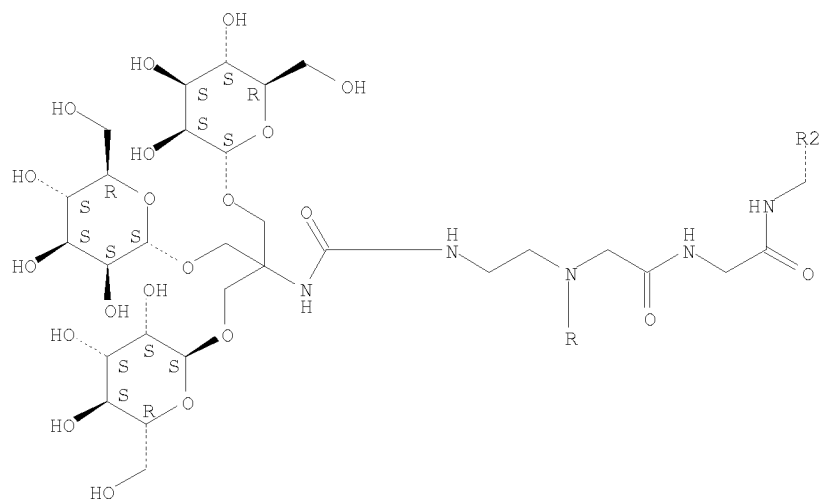


PAGE 2-A



PAGE 3-A



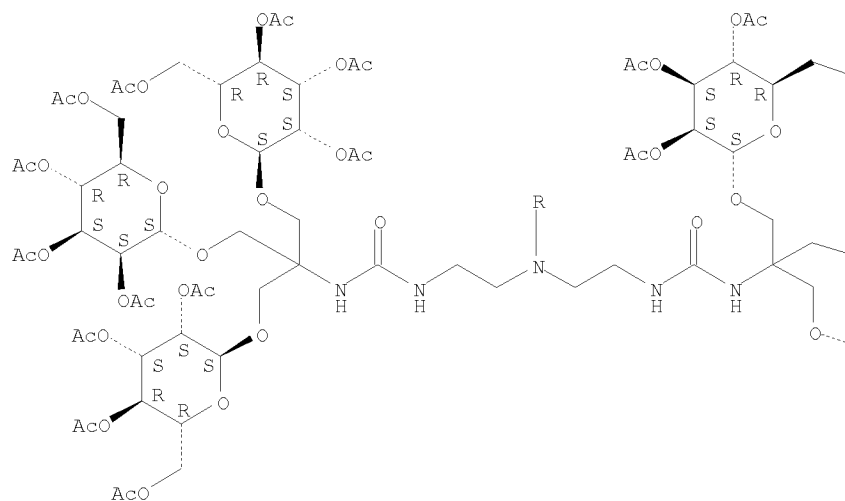
IT **937255-64-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (use of Ellman safety-catch linker for solid-phase assisted synthesis  
 of multivalent glycoconjugate dendrimers)

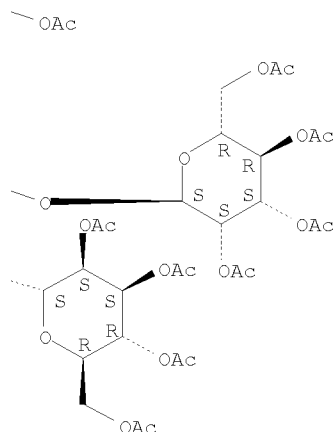
RN 937255-64-6 CAPLUS

CN  $\alpha$ -D-Glucopyranoside, methyl 6-[[[N,N-bis[2-[[[2-[[[2-[(2,3,4,6-tetra-O-acetyl- $\alpha$ -D-mannopyranosyl)oxy]-1,1-bis[[[2,3,4,6-tetra-O-acetyl- $\alpha$ -D-mannopyranosyl)oxy]methyl]ethyl]amino]carbonyl]amino]ethyl]glycyl]glycyl]amino]-6-deoxy- (CA INDEX NAME)

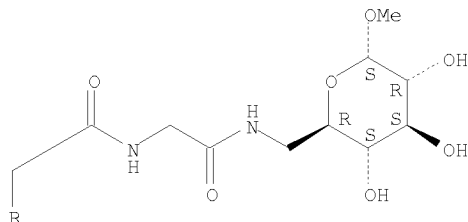
Absolute stereochemistry. Rotation (+).



PAGE 1-B



PAGE 2-A



REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:71794 CAPLUS

DOCUMENT NUMBER: 146:349958

TITLE: Copper(II) complexes with  $\beta$ -cyclodextrin-homocarnosine conjugates and their antioxidant activity

AUTHOR(S): Bellia, Francesco; La Mendola, Diego; Maccarrone, Giuseppe; Mineo, Placido; Vitalini, Daniele; Scamporrino, Emilio; Sortino, Salvatore; Vecchio, Graziella; Rizzarelli, Enrico

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, 6, CT 95125, Italy

SOURCE: Inorganica Chimica Acta (2007), 360(3), 945-954  
CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cu(II) complexes of the  $\beta$ -cyclodextrin ( $\beta$ -CD) functionalized with homocarnosine (Hc) in the primary (CDHC6) and secondary rim (CDHC3) were characterized by different spectroscopic techniques such as UV-visible absorption, CD, ESR and electron-spray mass spectrometry. Taken together, all the spectroscopic parameters indicate the formation of different Cu(II) complex species at various pH values. In the CDHC3 Cu(II) complex species, a direct involvement of the secondary hydroxyl Group 2 of functionalized  $\beta$ -CD's ring was pointed out. The antioxidant activity of the Cu(II) complexes of the two derivs. was determined through pulse radiolysis measurements. The results obtained provide direct evidence for a high catalytic activity of both complexes towards the dismutation of the superoxide anion radical. Also the complex formation is not detrimental to the excellent scavenger activity exhibited

by the ligands alone towards hydroxyl radicals. These Cu complexes then represent very intriguing antioxidant agents against known toxic reactive O species.

IT **929220-00-8DP**, copper complex

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);

USES (Uses)

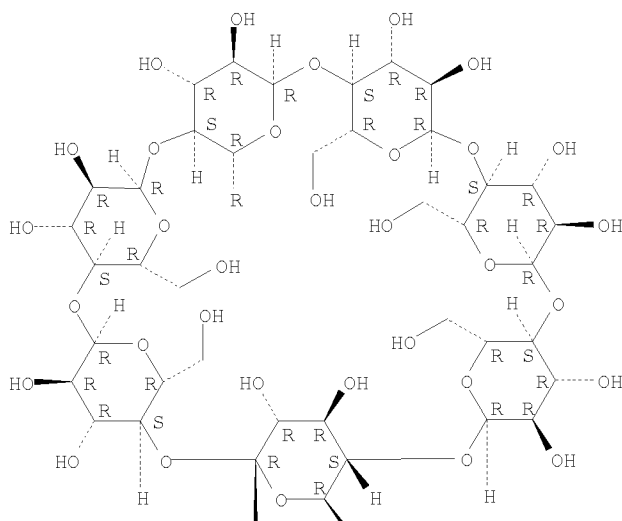
(preparation, antioxidant and hydroxyl radical scavenging activity of copper complexes with homocarnosine derivs. of  $\beta$ - **cyclodextrin**)

RN 929220-00-8 CAPLUS

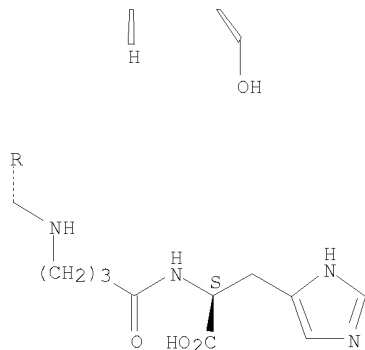
CN L-Histidine, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1-oxobutyl]-  
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:904991 CAPLUS

DOCUMENT NUMBER: 145:433575

TITLE: Supramolecular control of oligosaccharide-protein interactions: switchable and tunable ligands for concanavalin A based on  $\beta$ - **cyclodextrin**

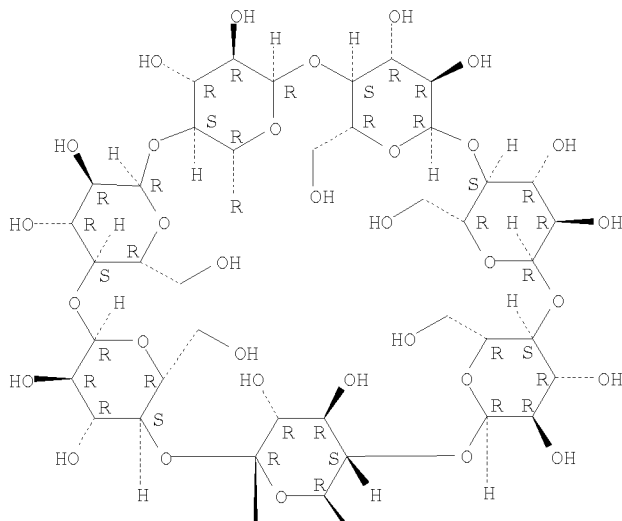
AUTHOR(S): Smiljanic, Nicolas; Moreau, Vincent; Yockot, Duplex; Benito, Juan M.; Garcia Fernandez, Jose M.; Djedaini-Pilard, Florence

CORPORATE SOURCE: Laboratoire des Glucides UMR6219, Universite Picardie

SOURCE: Jules Verne, Amiens, 80039, Fr.  
 Angewandte Chemie, International Edition (2006),  
 45(33), 5465-5468  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 145:433575  
 AB The ins and outs of binding: Supramol. control of carbohydrate-protein  
 interactions has been achieved through the design of  $\beta$ -  
cyclodextrin ( $\beta$ CD) based conjugates whose conformation is  
 dependent on a reversible self-inclusion process. The accessibility of  
 glycoligands to the lectin binding site is then regulated by allosteric  
 inclusion of effector/antagonist-like mols. in the  $\beta$ CD cavity.  
 IT **639464-25-8P 912654-92-3P**  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (switchable and tunable ligands for Con A based on  $\beta$ -  
cyclodextrin)  
 RN 639464-25-8 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-  
 [(O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-  
 (1 $\rightarrow$ 6)]- $\beta$ -D-mannopyranosyl)amino]-2-oxoethyl]amino]-1,4-  
 dioxobutyl]amino]- (9CI) (CA INDEX NAME)

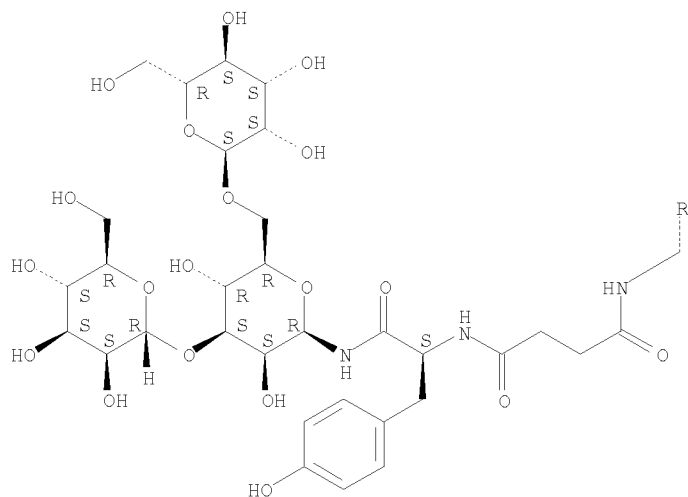
Absolute stereochemistry.

PAGE 1-A



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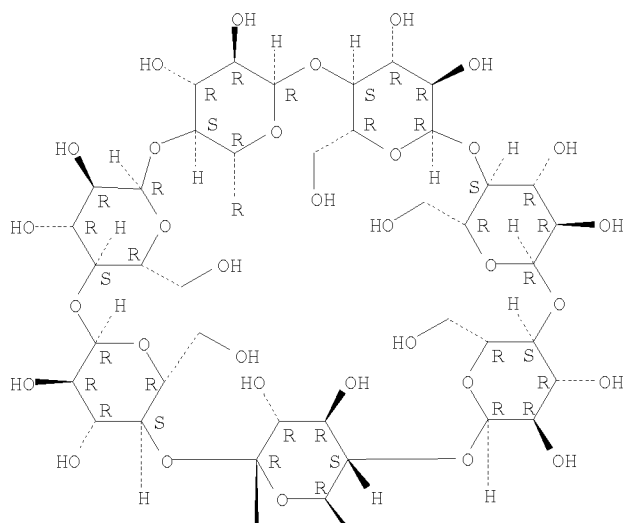


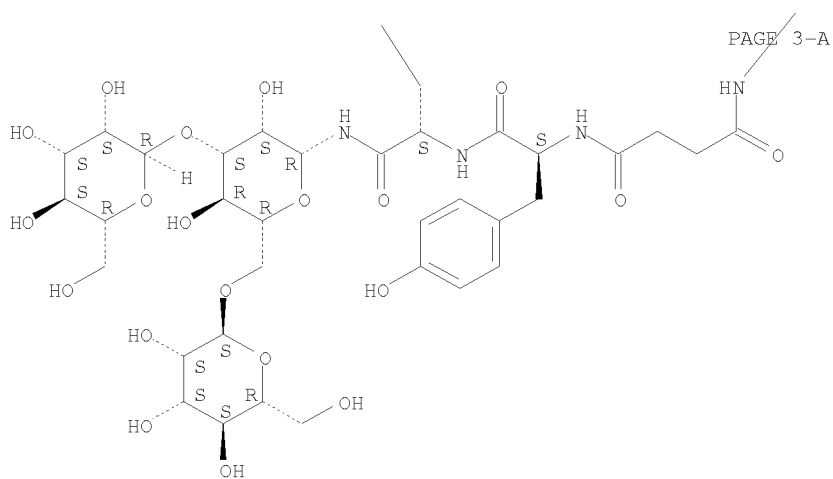
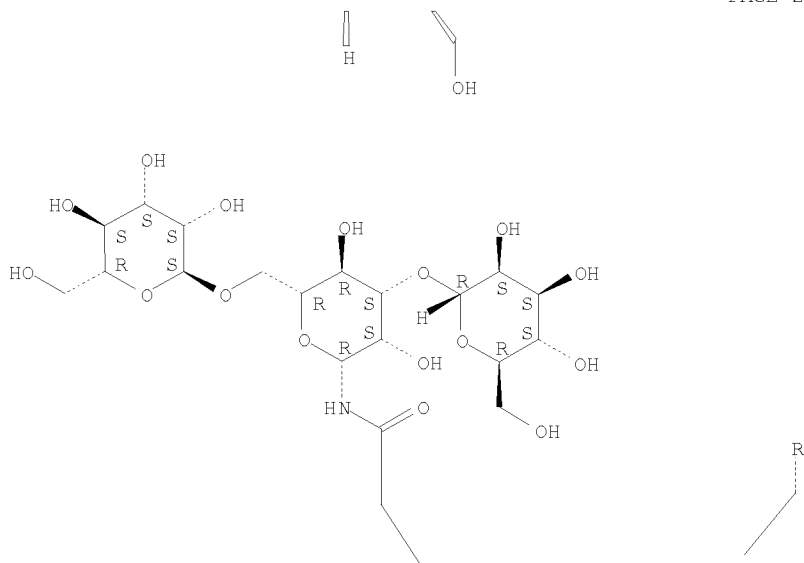


RN 912654-92-3 CAPLUS

CN L-Glutamamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tyrosyl-N1,N5-bis[0- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-mannopyranosyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



IT **639464-27-0**

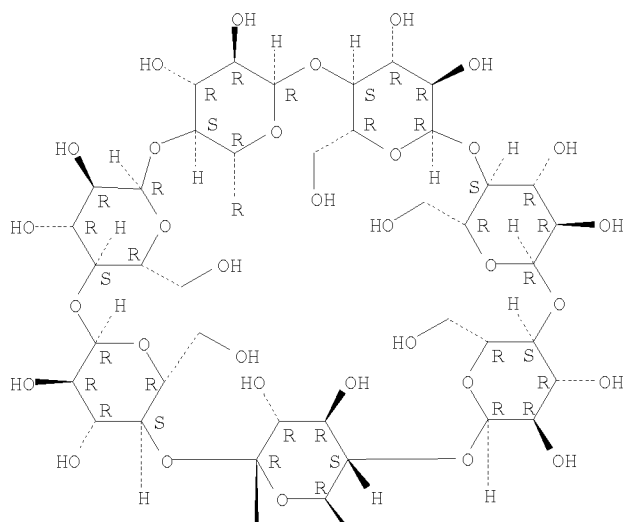
RL: RCT (Reactant); RACT (Reactant or reagent)  
 (switchable and tunable ligands for Con A based on  $\beta$ -  
**cyclodextrin**)

RN 639464-27-0 CAPLUS

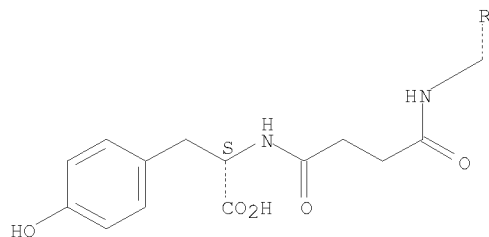
CN L-Tyrosine, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-  
 dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



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REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:790933 CAPLUS

DOCUMENT NUMBER: 145:202884

TITLE:  **$\beta$ -cyclodextrin** derivatives as antibacterial agents

INVENTOR(S): Fahmi, Nourredine; Schmidtman, Frank Werner; Hecht, Sidney

PATENT ASSIGNEE(S): Pinnacle Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 37pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006083678	A2	20060810	WO 2006-US2801	20060127
WO 2006083678	A3	20061214		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,

KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, KM, MD, RU, TJ, TM

AU 2006211173	A1	20060810	AU 2006-211173	20060127
CA 2596026	A1	20060810	CA 2006-2596026	20060127
US 20060199785	A1	20060907	US 2006-342339	20060127
EP 1846006	A2	20071024	EP 2006-733927	20060127
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2008528761	T	20080731	JP 2007-553231	20060127
IN 2007KN03008	A	20071130	IN 2007-KN3008	20070817
MX 2007010129	A	20071116	MX 2007-10129	20070820
KR 2007101347	A	20071016	KR 2007-719399	20070824
CN 101151037	A	20080326	CN 2006-80010155	20070927
PRIORITY APPLN. INFO.:			US 2005-647841P	P 20050128
			WO 2006-US2801	W 20060127

OTHER SOURCE(S): MARPAT 145:202884

AB The invention provides a new class of  $\beta$ - cyclodextrin derivs. I, wherein R is N which is mono-, di- or tri-substituted with alkyl, aralkyl, aryl, heterocyclic ring or heterocyclic alkyl, and any of which substituents can be further substituted with N, O or S which can be further substituted with H, alkyl, aralkyl or aryl; R1 is H, OH, OAc, O-lower alkyl, OMe, OSO<sub>3</sub>Na, or NH<sub>2</sub>; R2 is H, OH, OAc, O-lower alkyl, OMe, or O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>n</sub>; n = 1-10, were tested in vitro as antibiotics to which pathogenic bacteria have not been exposed, and thus should not have developed resistance. Numerous bacteria are known to cause diseases in humans. Among these bacteria are Enterococcus faecium, Escherichia coli, Pseudomonas aeruginosa, Bacillus atrophaeus, Staphylococcus aureus, Salmonella choleraesuis, Bacillus anthracis, and many others. A disturbing recent trend has been the development of resistance to existing antibiotics in numerous pathogenic bacteria. There is, therefore, a need for new antibiotics for which resistance has not yet emerged. Preferably, such antibiotics should be members of a new class of antibiotics, thus making evolutionary resistance to these antibiotics more difficult. This new class of antibiotics are derivs. of  $\beta$ - cyclodextrin ( $\beta$ -CD), which is a cyclic mol. comprising seven D-glucose units. Thus, I (R = NH<sub>2</sub>, R1 = R2 = OH) was tested in vitro alone or in combination with other drugs as antibiotic against bacteria such as Staphylococcus aureus (MIC > 200  $\mu$ g/mL) as antibacterial agent and mammalian cytotoxicity of lung cancer cells A549 (IC<sub>50</sub> = 720).

IT **904908-85-6**

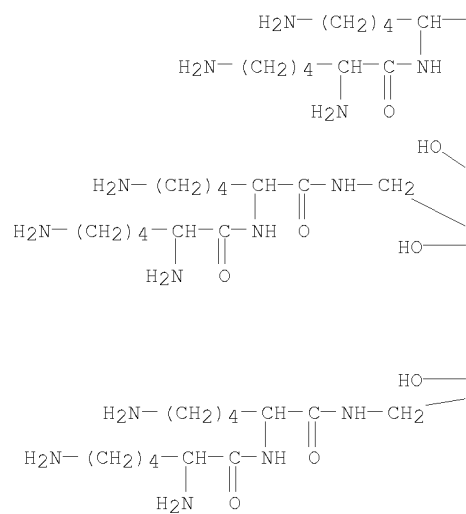
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

( $\beta$ - cyclodextrin derivs. as antibacterial agents)

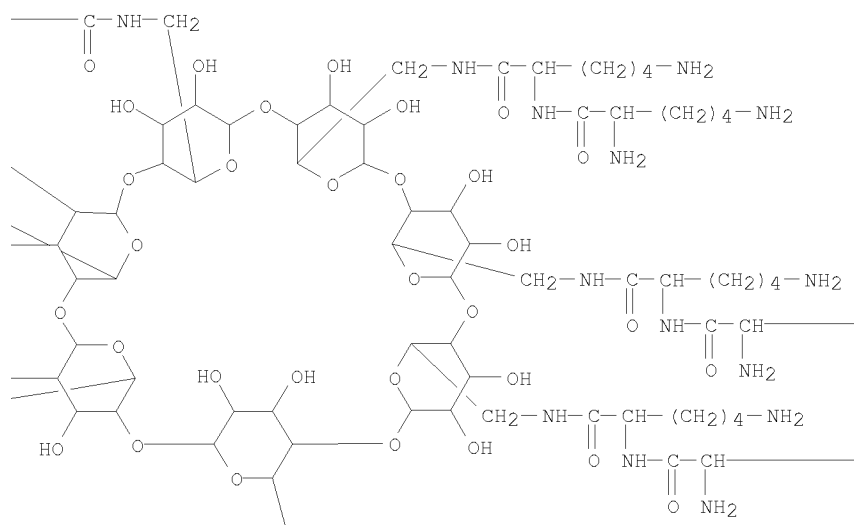
RN 904908-85-6 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6B,6C,6D,6E,6F,6G-heptadeoxy-6A,6B,6C,6D,6E,6F,6G-heptakis[(L-lysyl-L-lysyl)amino]-, heneicosahydrochloride (9CI) (CA INDEX NAME)

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PAGE 1-C

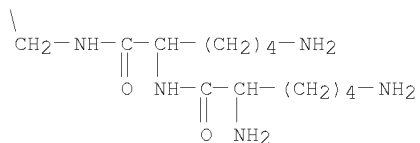
$$\text{---}(\text{CH}_2)_4\text{---NH}_2$$

$$\text{---}(\text{CH}_2)_4\text{---NH}_2$$

PAGE 2-A

●21 HCl

PAGE 2-B



L8 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:506101 CAPLUS

DOCUMENT NUMBER: 146:522042

TITLE: Dinuclear zinc(II) complex of a dipeptide possessing host and guest moieties promoted phosphodiester bond cleavage

AUTHOR(S): Goshima, Itsuka; Sakai, Nobue; Izuhara, Nobuko; Yamamura, Hatsuo; Kawai, Masao

CORPORATE SOURCE: Graduate School of Engineering, Nagoya Institute of Technology, Nagoya, Aichi, 466-8555, Japan

SOURCE: Peptide Science (2006), Volume Date 2005, 42nd, 359-360

CODEN: PSCIFQ; ISSN: 1344-7661

PUBLISHER: Japanese Peptide Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A symposium report. A dipeptide composed of two Orn residues possessing dipicolylamino groups on their side chains, and a Boc and a  $\beta$ -cyclodextrin at the N- and C-termini, resp., as a guest and a host moiety was synthesized. Dinuclear zinc complex of the dipeptide effectively promoted phosphodiester bond cleavage due to intramol. host-guest complexation which enabled efficient cooperative functioning of

the two metal ion centers. Addition of an external guest mol. decreased the activity possibly by controlling the self-inclusion.

IT **936745-36-7DP**, zinc complexes **936745-38-9DP**, zinc complexes

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);  
USES (Uses)

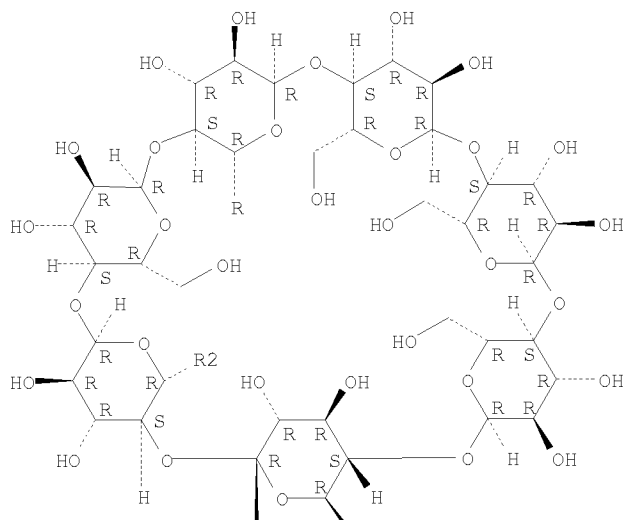
(preparation of zinc complexes of ornithine dipeptide containing both host and guest moieties, and phosphodiester bond cleavage mediated by the zinc-dipeptide complex)

RN 936745-36-7 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N2-[(1,1-dimethylethoxy)carbonyl]-N5,N5-bis(2-pyridinylmethyl)-L-ornithyl-N5,N5-bis(2-pyridinylmethyl)-L-ornithyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

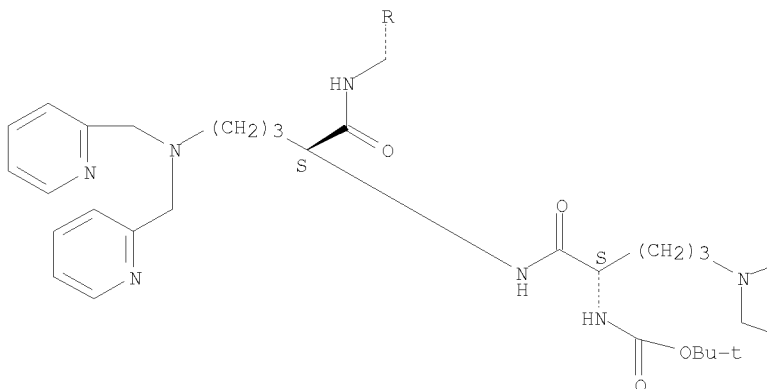
PAGE 1-A

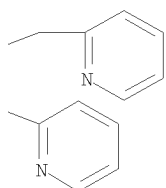


PAGE 2-A



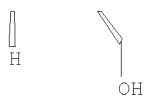
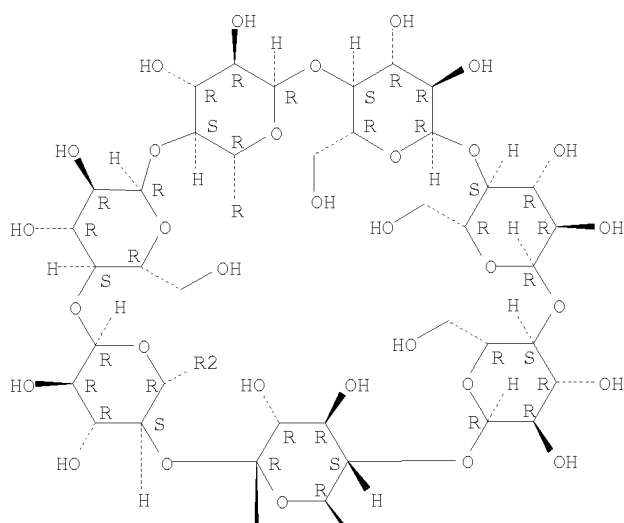
PAGE 3-A



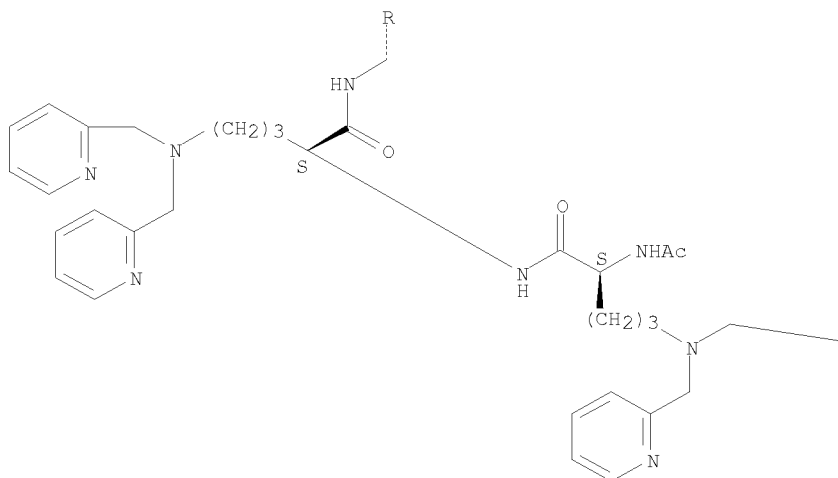


RN 936745-38-9 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-[ [N2-acetyl-N5,N5-bis(2-pyridinylmethyl)-L-ornithyl-N5,N5-bis(2-pyridinylmethyl)-L-ornithyl] amino]-6A-deoxy- (CA INDEX NAME)

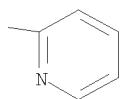
Absolute stereochemistry.



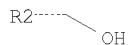
PAGE 3-A



PAGE 3-B



PAGE 4-A



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1125845 CAPLUS  
 DOCUMENT NUMBER: 143:406148  
 TITLE: Preparation of peptide-bonded cyclodextrin derivative capable of forming host-guest bridge as shape memory element  
 INVENTOR(S): Hamasaki, Keita  
 PATENT ASSIGNEE(S): Shibaura Institute of Technology, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005289882 A 20051020 JP 2004-107404 20040331  
 PRIORITY APPLN. INFO.: JP 2004-107404 20040331

AB There is disclosed a shape memory element consisting of a polymer capable of forming a helical structure, cyclodextrin (host) bonded to the polymer, an affinity compound (guest) having affinity towards cyclodextrin and bonded to the polymer at a position different from that of cyclodextrin wherein a bridge is formed by inclusion of the affinity compound (guest) inside the cavity of cyclodextrin (host) to fix the helical structure of the polymer. The affinity compound is either lipophilic or hydrophobic. This shape memory element reduces shape memory into a nanoscale and provides shape memory in mol. unit. When external guest (external stimulation) is added after this shape memory element temporarily fixes the helical structure of polymer by forming the host-guest bridge, the affinity guest compound is released from the cavity of the cyclodextrin host as the external guest is included inside the cyclodextrin host, and then the fixation of polymer helical structure is eliminated, resulting in the alteration of the polymer shape. When the external guest is removed, the host-guest bridge is regenerated to restore the memorized helical structure. Thus, Ac-Ala-Glu-Ala-Ala-Lys-Arg-Glu-Ala-Glu(R)-Ala-Arg-Ala-Glu-Ala-Ala-Lys(R1)-Arg-Ala-NH<sub>2</sub> (I) (R = 6-amino-6-deoxy- $\beta$ -cyclodextrin, R1 = naphthalen-2-ylacetyl, cholic acid) were prepared. This glycopeptides I reduced the content of  $\alpha$ -helix according to CD measurement when adamantanol was added as the external guest. When adamantanol was removed, the  $\alpha$ -helix content (shape memory) was restored.

IT **867153-80-8P 867153-81-9P**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

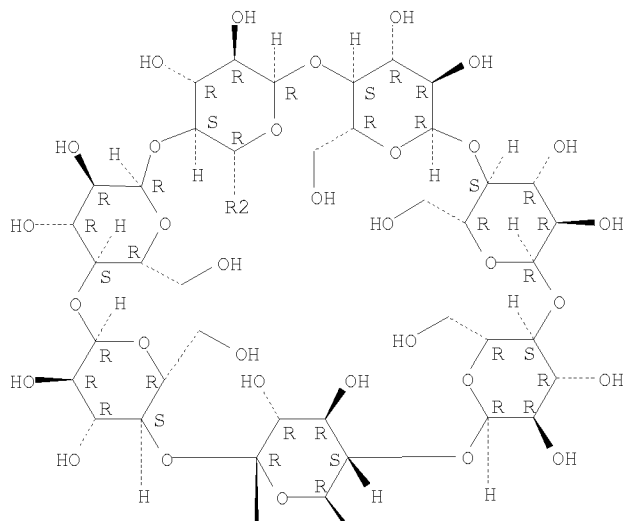
(preparation of peptide-bonded cyclodextrin derivative capable of forming host-guest bridge as nanoscale shape memory element)

RN 867153-80-8 CAPLUS

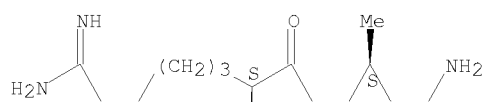
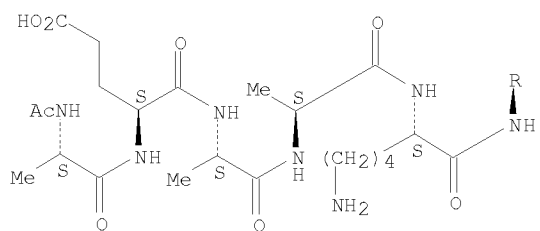
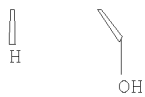
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-arginyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

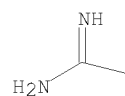
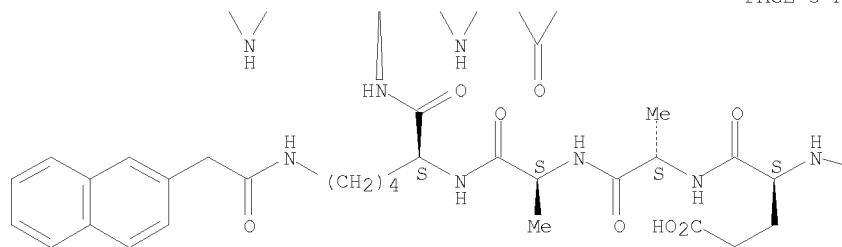
PAGE 1-A

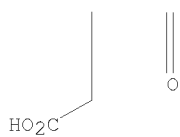
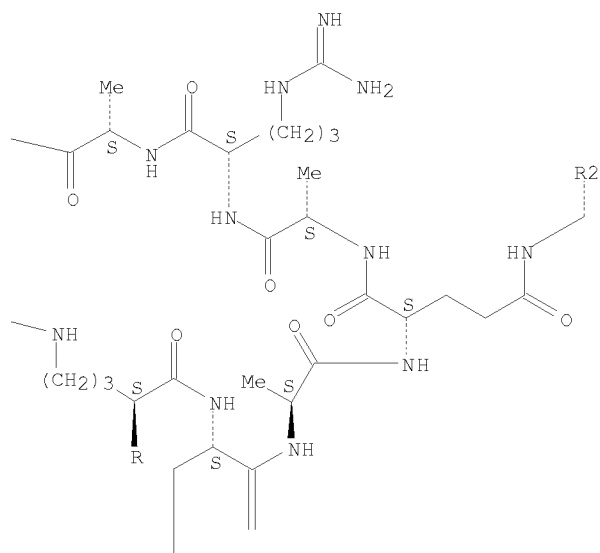


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PAGE 3-A

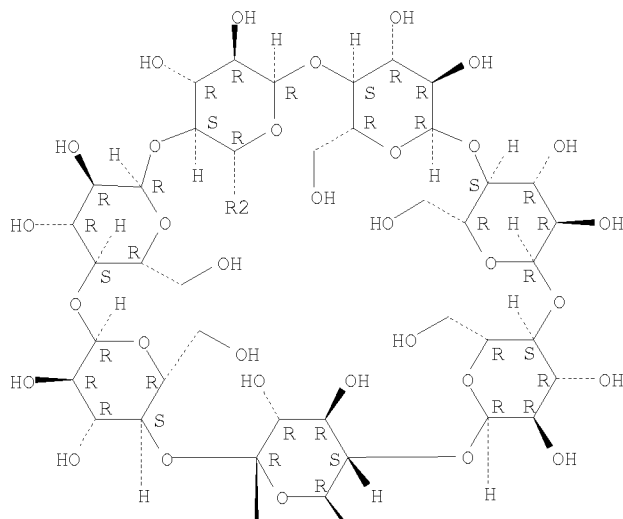




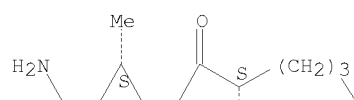
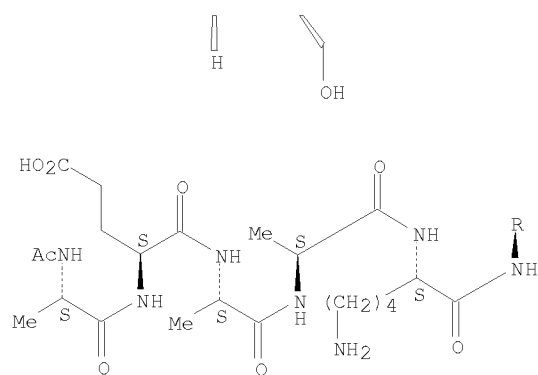
RN 867153-81-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[(3 $\alpha$ , 5 $\beta$ , 7 $\alpha$ , 12 $\alpha$ )-3, 7, 12-trihydroxycholan-24-oyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

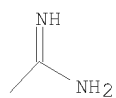
Absolute stereochemistry.



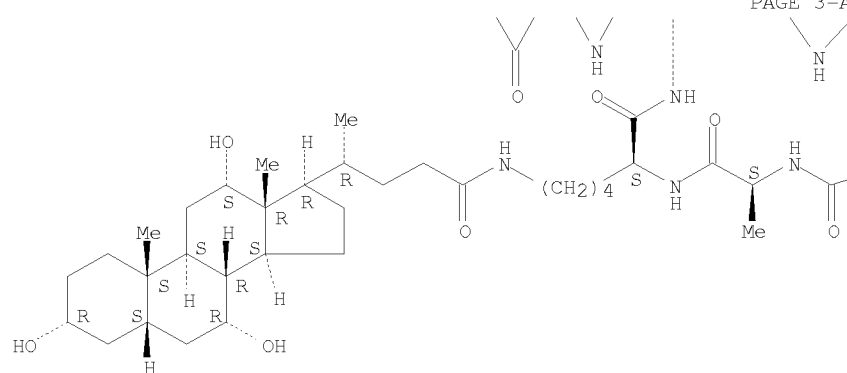
PAGE 2-A

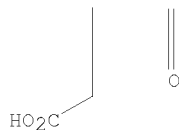
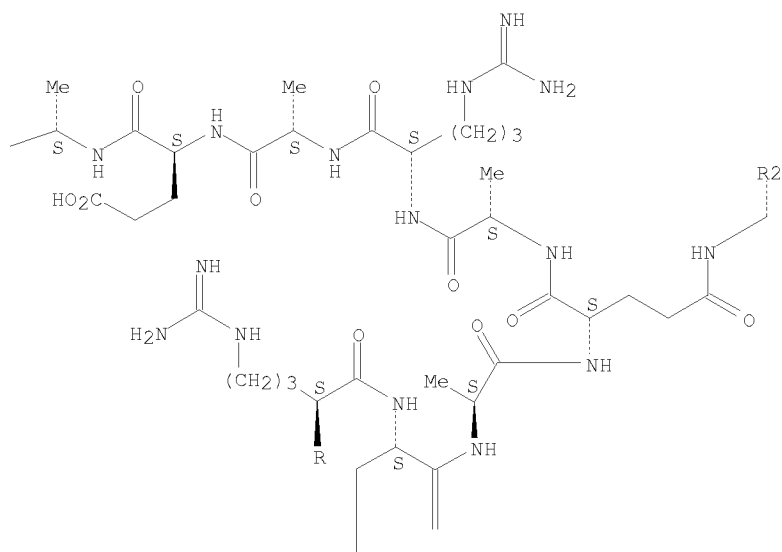


PAGE 2-B



PAGE 3-A





L8 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:367931 CAPLUS

DOCUMENT NUMBER: 142:411584

TITLE: Preparation of amphiphilic amino acid-containing  
cyclodextrin derivatives

INVENTOR(S): Perly, Bruno; Moutard, Stephane; Pilard, Florence

PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Universite de  
Picardie Jules Verne

SOURCE: Fr. Demande, 103 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2861396	A1	20050429	FR 2003-50736	20031024
WO 2005042590	A2	20050512	WO 2004-FR50519	20041021
WO 2005042590	A3	20050825		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1675876 A2 20060705 EP 2004-805762 20041021

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK  
 JP 2007509218 T 20070412 JP 2006-536144 20041021  
 US 20070142324 A1 20070621 US 2006-576346 20061120  
 PRIORITY APPLN. INFO.: FR 2003-50736 A 20031024  
 WO 2004-FR50519 W 20041021

OTHER SOURCE(S): MARPAT 142:411584

AB Amphiphilic cyclodextrin derivs. I, wherein R1 is substituted amine; R2 is H, Me, i-Pr, hydroxypropyl, sulfo-Bu ether; R3 is H, R2 except when R2 is hydroxypropyl; R4 is OH, R1, R2 except when R2 is hydroxypropyl; n is 5-7, were prepared Thus, amino acid-containing cyclodextrin II was prepared

IT 850342-14-2P

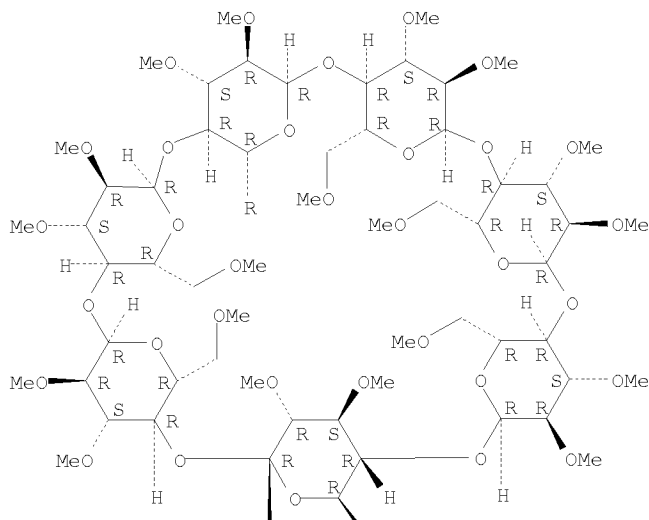
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of amphiphilic amino acid containing cyclodextrin derivs.)

RN 850342-14-2 CAPLUS

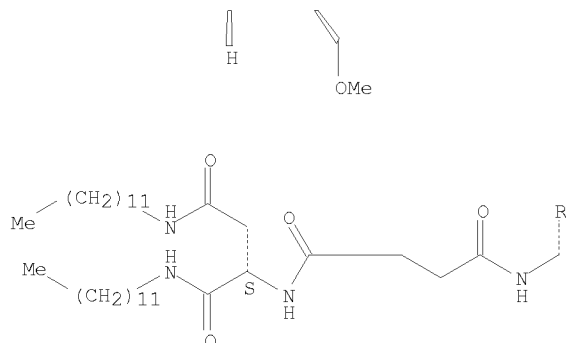
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Absolute stereochemistry. Rotation (+).

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IT 850342-08-4P 850342-10-8P 850342-12-0P  
850342-13-1P 850342-19-7P 850342-20-0P  
850342-22-2P 850342-24-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation)

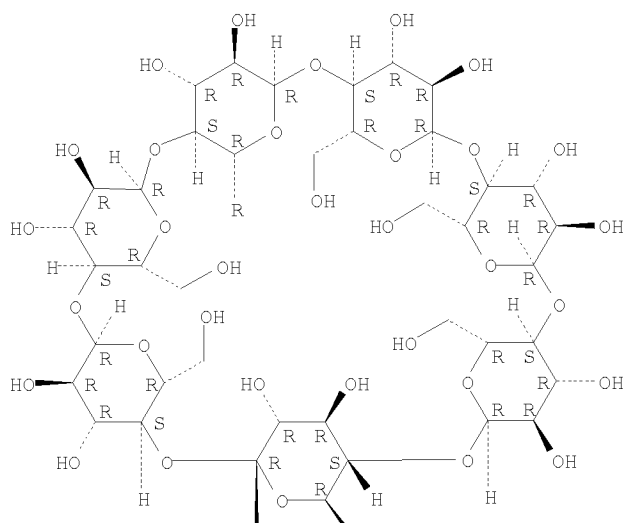
(preparation of amphiphilic amino acid containing cyclodextrin  
derivs.)

RN 850342-08-4 CAPLUS

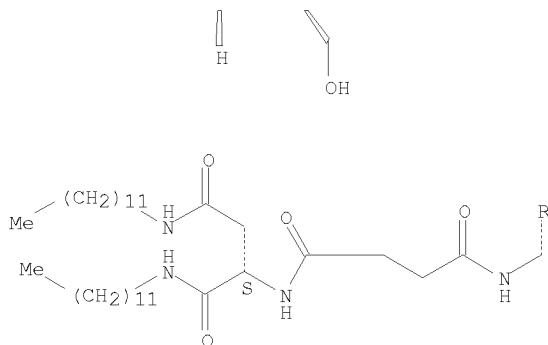
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-  
[(dodecylamino) carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (CA  
INDEX NAME)

Absolute stereochemistry. Rotation (+).

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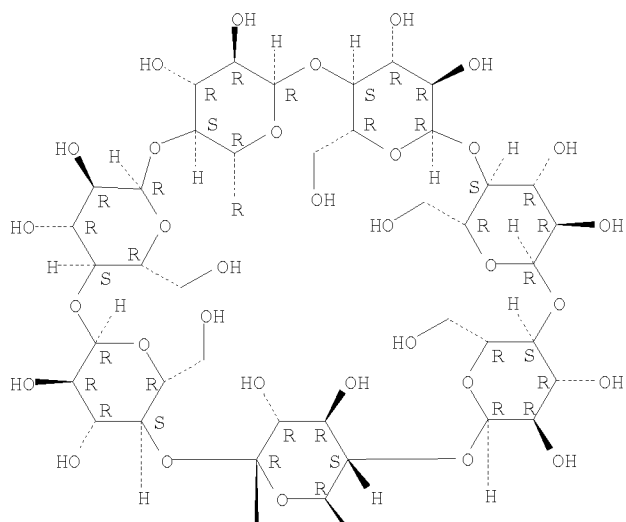


RN 850342-10-8 CAPLUS

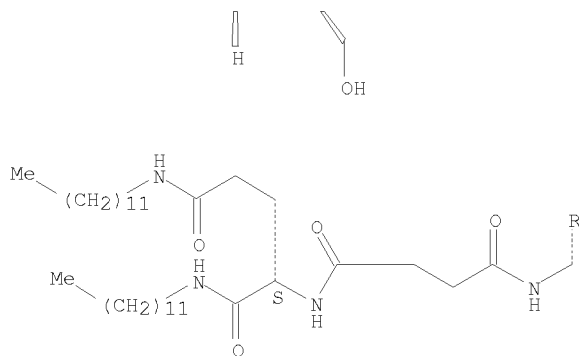
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-4-(dodecylamino)-1-  
[(dodecylamino) carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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PAGE 2-A

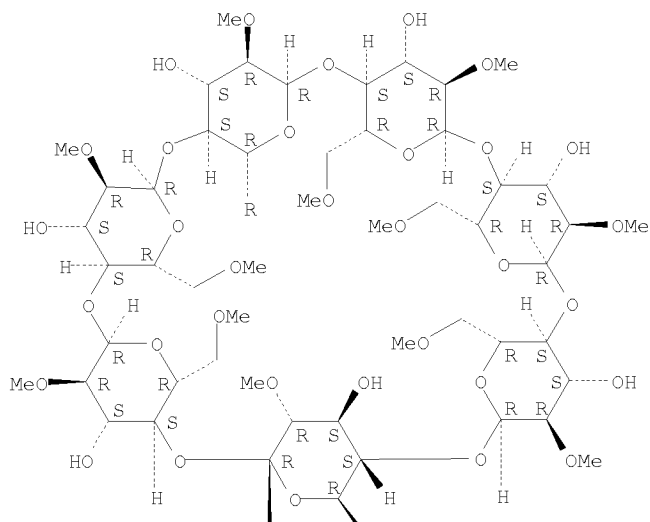


RN 850342-12-0 CAPLUS

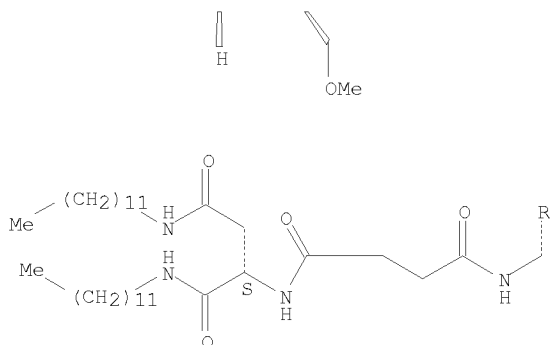
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(dodecylamino)-1-[(dodecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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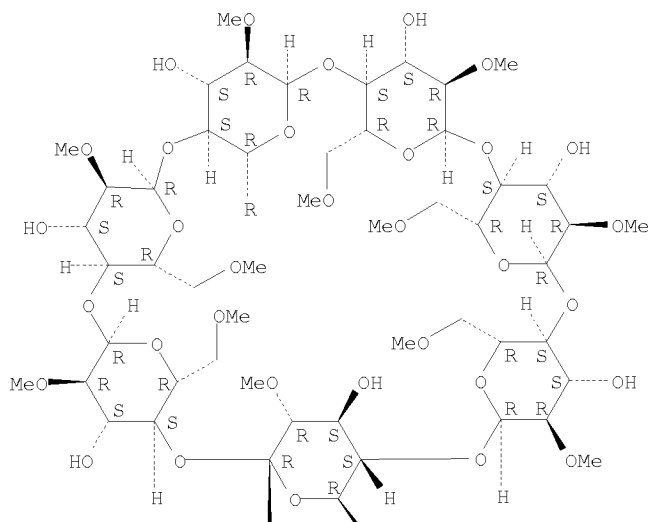


RN 850342-13-1 CAPLUS

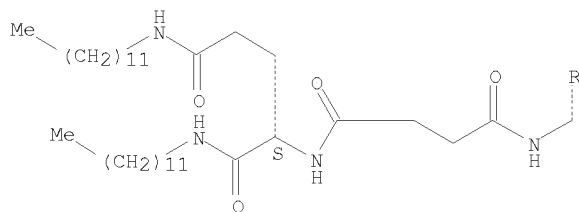
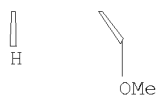
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-4-(dodecylamino)-1-[(dodecylamino)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,6B,6C,6D,6E,6F,6G-trideca-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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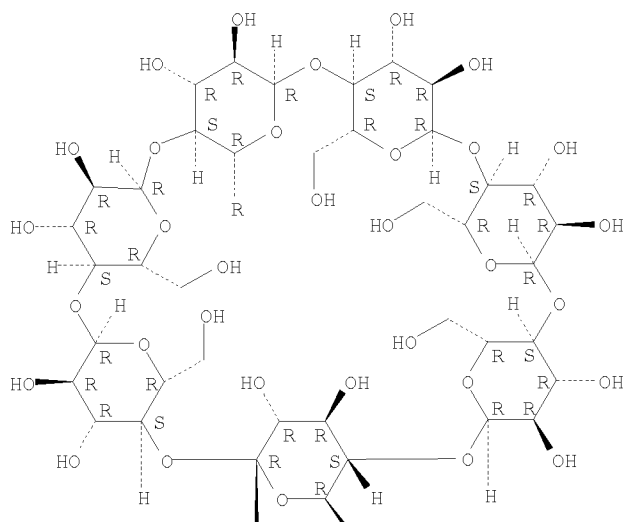


RN 850342-19-7 CAPLUS

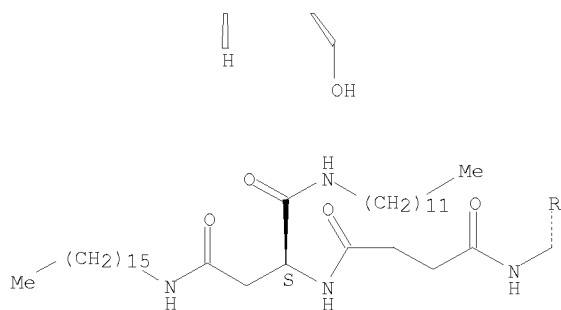
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(dodecylamino)carbonyl]-3-(hexadecylamino)-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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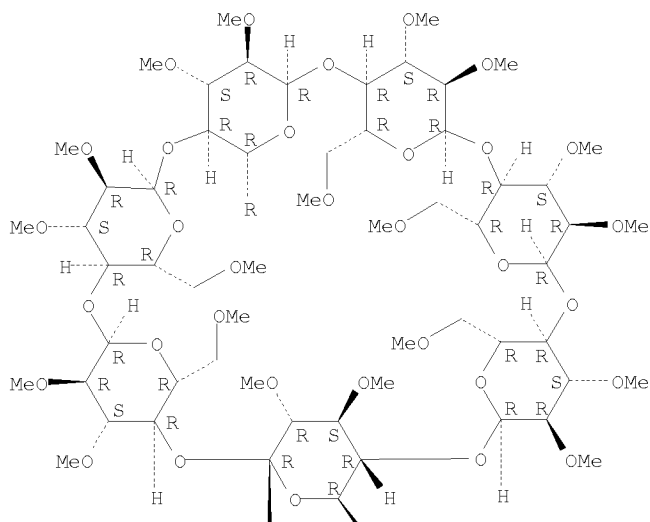


RN 850342-20-0 CAPLUS

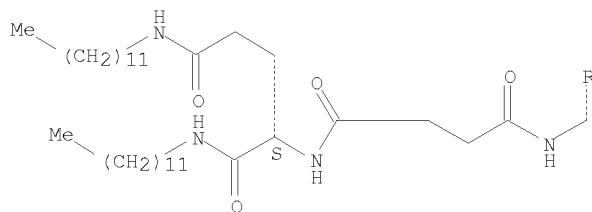
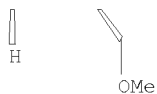
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-4-(dodecylamino)-1-  
[(dodecylamino)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-  
2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-  
methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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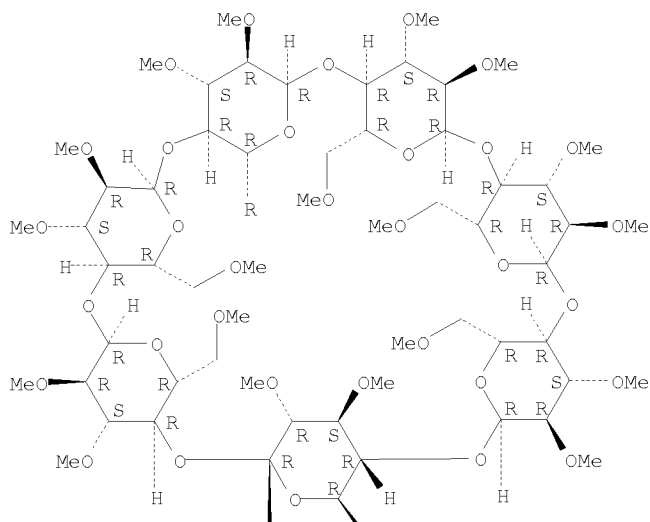


RN 850342-22-2 CAPLUS

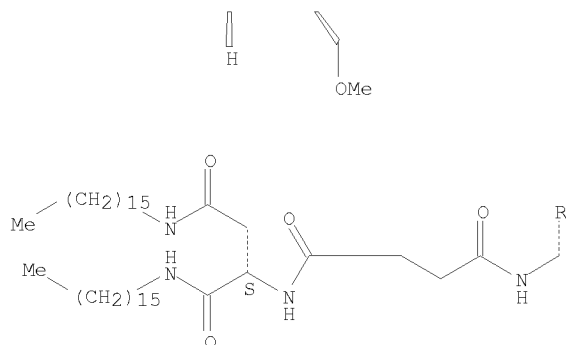
CN  **$\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-3-(hexadecylamino)-1-[(hexadecylamino)carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (9CI) (CA INDEX NAME)]]**

Absolute stereochemistry.

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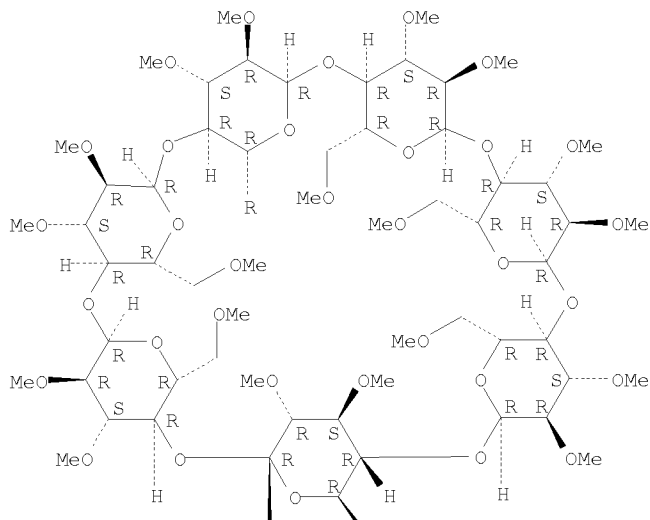


RN 850342-24-4 CAPLUS

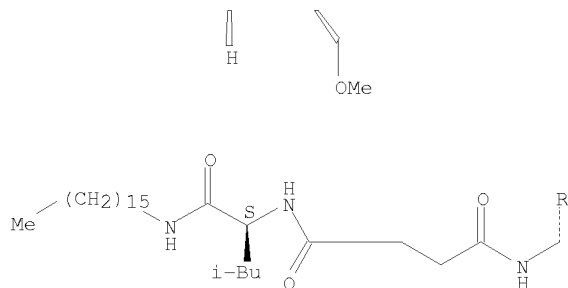
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(hexadecylamino)carbonyl]-3-methylbutyl]amino]-1,4-dioxobutyl]amino]-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:715220 CAPLUS

DOCUMENT NUMBER: 141:395732

TITLE: Molecular Recognition Thermodynamics and Structural Elucidation of Interactions between Steroids and Bridged Bis( $\beta$ - cyclodextrin)s

AUTHOR(S): Liu, Yu; Yang, Ying-Wei; Yang, En-Cui; Guan, Xu-Dong

CORPORATE SOURCE: Department of Chemistry, State Key Laboratory of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China

SOURCE: Journal of Organic Chemistry (2004), 69(20), 6590-6602 CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:395732

AB A series of bridged bis( $\beta$ - cyclodextrin(CD))s were synthesized, i.e., bridged bis( $\beta$ -CD)s bearing binaphthyl or biquinoline tethers and bridged bis( $\beta$ -CD)s possessing dithiobis(benzoyl) tether, and their complex stability consts. (KS), enthalpy ( $\Delta H^\circ$ ), and entropy changes ( $\Delta S^\circ$ ) for the 1:2 inclusion complexation with representative steroids, deoxycholate, cholate, glycocholate, and taurocholate, have been determined in an aqueous phosphate buffer solution of pH 7.20 at 298.15 K by means of titration microcalorimetry. The original conformations of bridged bis( $\beta$ - cyclodextrin)s were investigated by CD and  $^1\text{H}$  ROESY spectroscopy.

Structures of the inclusion complexes between steroids and bridged bis( $\beta$ -CD)s in solution were elucidated by 2D NMR expts., indicating that anionic groups of two steroid mols. penetrate, resp., into the two hydrophobic CD cavities in one 6,6'-bridged bis( $\beta$ -CD) mol. from the secondary rim to give a 1:2 binding mode upon inclusion complexation. The results obtained from titration microcalorimetry and 2D NMR expts. jointly demonstrate that bridged bis( $\beta$ -CD)s tethered by protonated amino group possessing different substituted groups can enhance not only the mol. binding ability toward steroids by electrostatic interaction but also mol. selectivity. Thermodynamically, the resulting 1:2 bis( $\beta$ -CD)-steroid complexes are formed by an enthalpy-driven process, accompanied by smaller entropy loss. The increased complex stability mainly results from enthalpy gain, accompanied by large conformational change and extensive desolvation effects for the 1:2 inclusion complexation between bis( $\beta$ -CD)s and steroids.

IT 787551-81-9 787551-82-0 787551-83-1  
787551-84-2

RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); FORM (Formation, nonpreparative); PROC (Process)

(mol. recognition thermodyn. and CD conformational anal. of binaphthyl tethered bis( $\beta$ - cyclodextrin) inclusion complexes with steroids)

RN 787551-81-9 CAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,12 $\alpha$ )-, compd. with 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy- $\beta$ -cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

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CRN 786691-27-8

CMF C112 H168 N6 O70

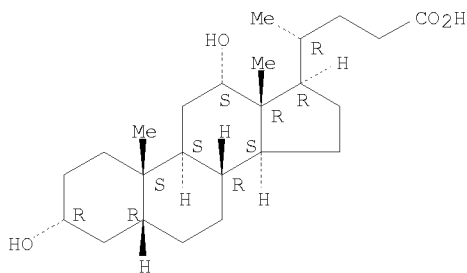
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 83-44-3

CMF C24 H40 O4

Absolute stereochemistry.



RN 787551-82-0 CAPLUS

CN Cholan-24-oic acid, 3,7,12-trihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-, compd. with 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy- $\beta$ -cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 786691-27-8

CMF C112 H168 N6 O70

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

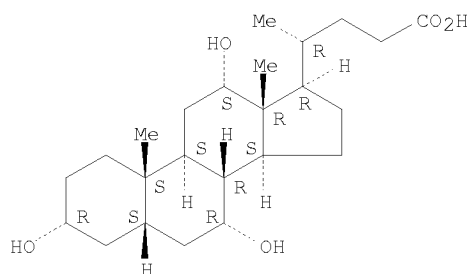
CM 2

CRN 81-25-4

10576346

CMF C24 H40 O5

Absolute stereochemistry.



RN 787551-83-1 CAPLUS

CN Glycine, N-[(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-3,7,12-trihydroxy-24-oxocholan-24-yl]-, compd. with 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy- $\beta$ -cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 786691-27-8

CMF C112 H168 N6 O70

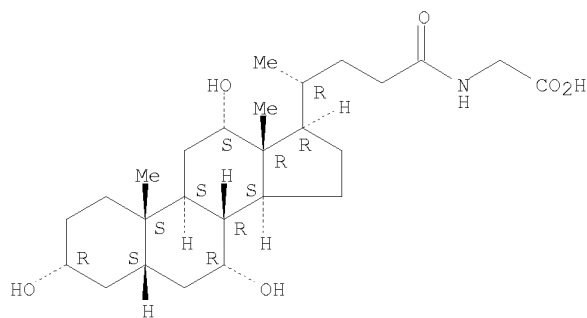
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 475-31-0

CMF C26 H43 N O6

Absolute stereochemistry.



RN 787551-84-2 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[(1R)-[1,1'-binaphthalene]-2,2'-diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy-, compd. with 2-[(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]ethanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 786691-27-8

CMF C112 H168 N6 O70

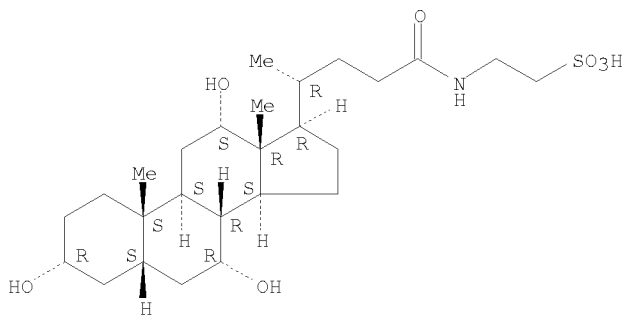
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 81-24-3

CMF C26 H45 N O7 S

Absolute stereochemistry.



IT **786691-27-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of binaphthyl bridged bis( $\beta$ - cyclodextrin)  
derivs.)

RN 786691-27-8 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[ (1R)-[1,1'-binaphthalene]-2,2'-  
diylbis[imino(2-oxo-2,1-ethanediyl)imino-2,1-ethanediylimino]]bis[6A-deoxy-  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:34857 CAPLUS

DOCUMENT NUMBER: 140:304060

TITLE: Coordination features of difunctionalized  $\beta$ -  
cyclodextrins with carnosine: ESI-MS and  
spectroscopic investigations on  
6A,6D-di( $\beta$ -alanyl-L-histidine)-6A,6D-dideoxy-  
 $\beta$ - cyclodextrin and  
6A,6C-di( $\beta$ -alanyl-L-histidine)-6A,6C-dideoxy-  
 $\beta$ - cyclodextrin and their copper(II)  
complexes

AUTHOR(S): Mineo, Placido; Vitalini, Daniele; La Mendola, Diego;  
Rizzarelli, Enrico; Scamporrino, Emilio; Vecchio,  
Graziella

CORPORATE SOURCE: CNR-Sezione di Catania, Istituto di Chimica e  
Tecnologia dei Polimeri, Catania, 95125, Italy

SOURCE: Journal of Inorganic Biochemistry (2004), 98(2),  
254-265

CODEN: JIBIDJ; ISSN: 0162-0134

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:304060

AB The synthesis and characterization of two  $\beta$ - cyclodextrins  
( $\beta$ -CD) functionalized with two units of carnosine  
( $\beta$ -alanyl-L-histidine) through the amino group,  
6A,6C-( $\beta$ -alanyl-L-histidine)-6A,6C-dideoxy- $\beta$ -  
cyclodextrin (ACDDAH) and 6A,6D-( $\beta$ -alanyl-L-histidine)-6A,6D-  
dideoxy- $\beta$ - cyclodextrin (ADDDAH), are reported. NMR and CD  
data of the ligands indicate a different interaction of dipeptide chains  
with upper rim and cavity of  $\beta$ -CD. Analogously, spectroscopic and  
electrospray ionization mass spectrometry data show that different  
copper(II) complex species are formed by the two regioisomers. The  
ability of carnosine-cyclodextrin derivs. to bind copper ions in  
a head-to-tail fashion induces the formation of oligomeric species (up to  
hexamers) in the case of ACCDAH, where the two carnosine moieties are  
adjacent, while in the ADCDAH case the mutual interaction between the  
peptidic chains of two ADCDAH mols. allows the almost exclusive formation  
of a copper-assisted self-assembled dimeric species.

IT **393100-96-4**

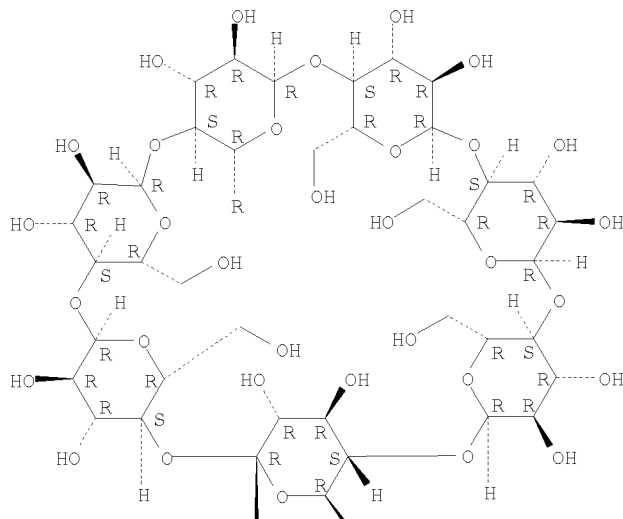
RL: PRP (Properties)  
(preparation of carnosine  $\beta$ - cyclodextrin derivs. and their  
complexation with copper)

RN 393100-96-4 CAPLUS

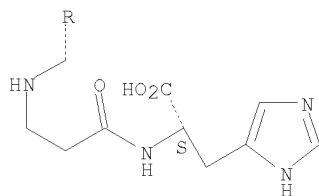
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA  
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



IT **527698-29-9P 677010-06-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

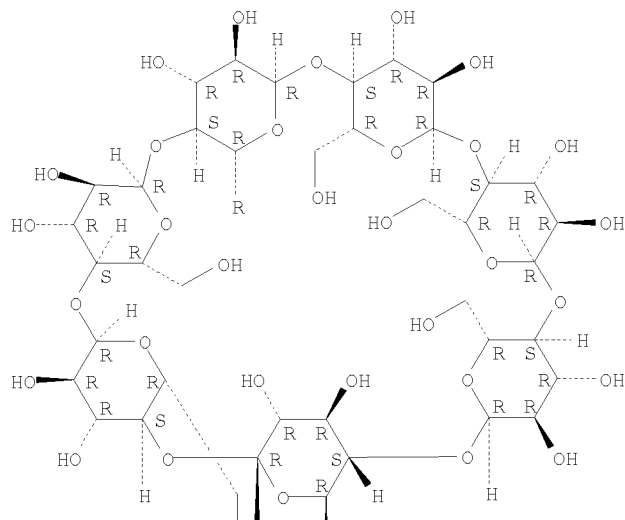
(preparation of carnosine  $\beta$ - cyclodextrin derivs. and their  
complexation with copper)

RN 527698-29-9 CAPLUS

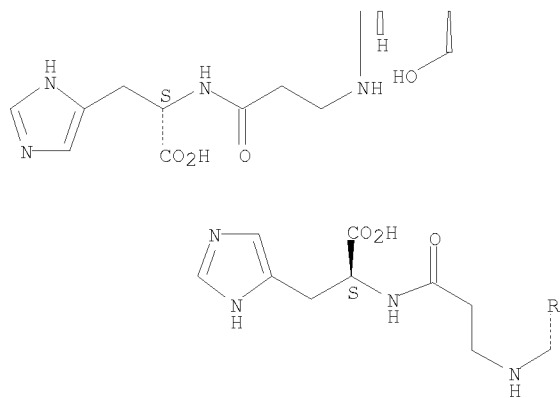
CN L-Histidine, 1,1'-(6A,6C-dideoxy- $\beta$ -cyclodextrin-6A,6C-diyl)bis( $\beta$ -  
alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



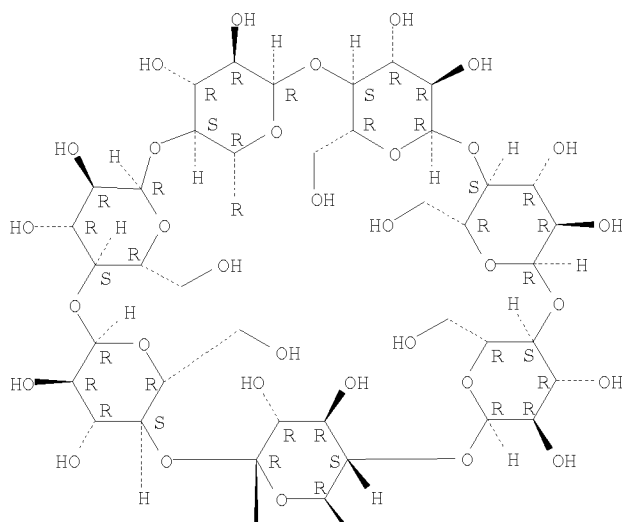
PAGE 2-A



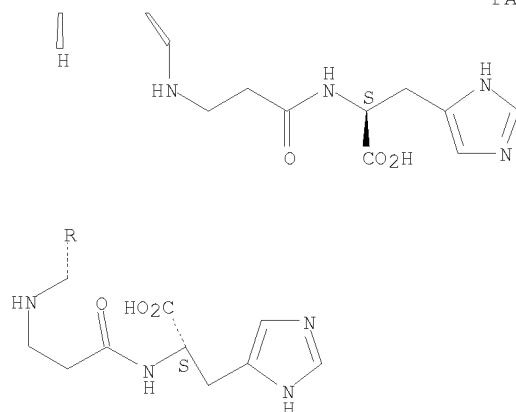
RN 677010-06-9 CAPLUS  
 CN L-Histidine, 1,1'-(6A,6D-dideoxy- $\beta$ -cyclodextrin-6A,6D-diyl)bis[ $\beta$ -  
 alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 2-A



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:905931 CAPLUS

DOCUMENT NUMBER: 140:246941

TITLE: Potentiometric, spectroscopic and antioxidant activity studies of SOD mimics containing carnosine  
 AUTHOR(S): Bonomo, Raffaele P.; Bruno, Valeria; Conte, Enrico; De Guidi, Guido; La Mendola, Diego; Maccarrone, Giuseppe; Nicoletti, Ferdinando; Rizzarelli, Enrico; Sortino, Salvatore; Vecchio, Graziella

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, 95125, Italy

SOURCE: Dalton Transactions (2003), (23), 4406-4415

CODEN: DTARAF; ISSN: 1477-9226

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Stability constant values and bonding details of the copper(II) complexes of the  $\beta$ - **cyclodextrin** functionalized with the carnosine dipeptide ( $\beta$ -alanyl-L-histidine) at its narrow (CDAH6) or at its wide (CDAH3) rim were determined in aqueous solution. The potentiometric and spectroscopic data (UV-vis, CD and EPR) show that the involvement of a secondary OH

group induces drastic differences in the coordination properties of CDAH3, in comparison with those of CDAH6. Direct and indirect assays were carried out showing that the copper(II) complexes with the two cyclodextrin derivs. are SOD-mimics with high catalytic activity. In addition the complex species are scavenger compds. towards  $\bullet\text{OH}$  radicals, giving rise to a particular kind of copper(II) complexes with a combined activity against two toxic radical species,  $\text{O}\bullet\text{-2}$  and  $\bullet\text{OH}$ . The cyclodextrin moiety contributes to the scavenger activity, without damaging the cellular membranes of neuronal and red blood cells.

IT **393100-96-4D**, copper complexes

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

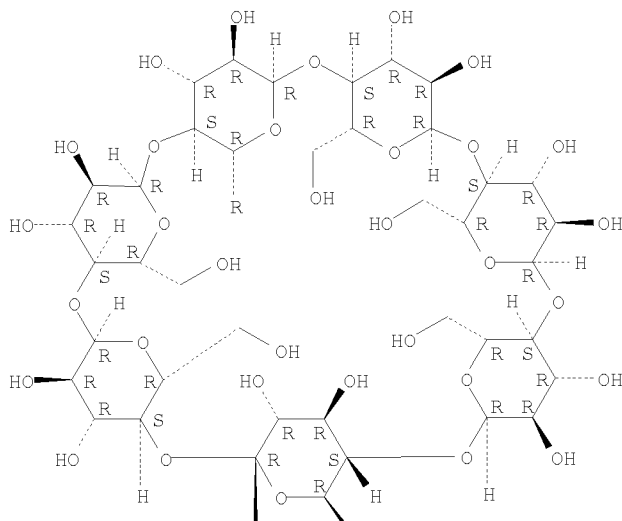
(potentiometric, spectroscopic and antioxidant activity studies of SOD mimics containing carnosine)

RN 393100-96-4 CAPLUS

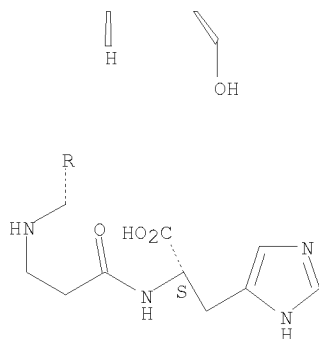
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

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REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:494965 CAPLUS

DOCUMENT NUMBER: 139:230983

TITLE: Supramolecular chemistry of cyclodextrin-peptide hybrids: Azobenzene-tagged peptides

AUTHOR(S): Ueno, Akihiko; Shimizu, Tomoko; Mihara, Hisakazu; Hamasaki, Keita; Pitchumani, K.

CORPORATE SOURCE: Department of Bioengineering, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

SOURCE: Journal of Inclusion Phenomena and Macrocyclic Chemistry (2003), Volume Date 2002, 44(1-4), 49-52  
CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB AC17, which is composed of 17 amino acids and has an azobenzene moiety but has no cyclodextrin (CD) unit in the side chain, exhibits 54% helix content. However, ACa17, which has both trans-azobenzene and  $\alpha$ -CD, shows 82% helix content. This result suggests that the helix structure is stabilized by host (CD)-guest (azobenzene) bridge in the side chain of the peptide. The helix content changed by trans-cis photoisomerization as shown by 64% helix content for ACa17 in its cis form. This result suggests that cis-azobenzene unit is excluded from the  $\alpha$ -CD cavity, thus resulting in the smaller helix content. The helix contents for AC $\beta$ 17, which has both azobenzene and  $\beta$ 1-CD, are 94% in the cis form and 87% in the trans form, suggesting that the cis form is included in the  $\beta$ -CD cavity. Azobenzene-tagged CD-peptide hybrids with histidine unit were also prepared and photoregulation of catalytic activity in ester hydrolysis was examined

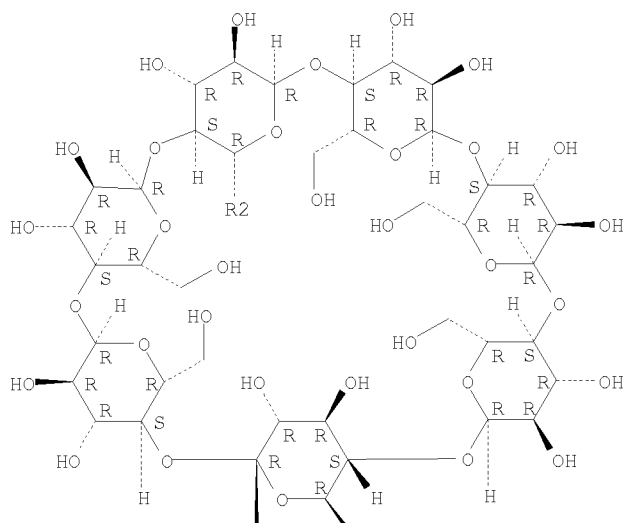
IT **595558-87-5 595558-90-0**  
RL: CAT (Catalyst use); PRP (Properties); USES (Uses)  
(helix content and stabilization of cyclodextrin-oligopeptide conjugates containing cis-trans azobenzene as measured by CD spectra)

RN 595558-87-5 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-histidyl-L-alanyl-L-alanyl-L-arginyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

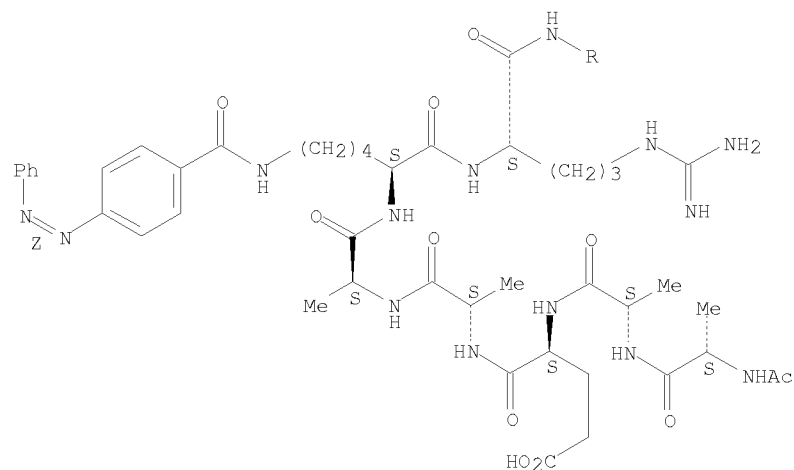
PAGE 1-A



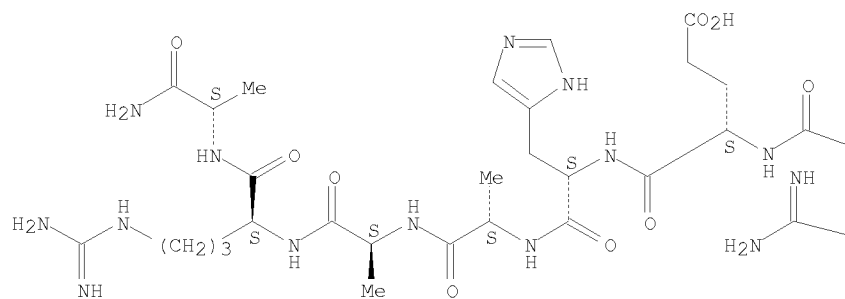
PAGE 2-A



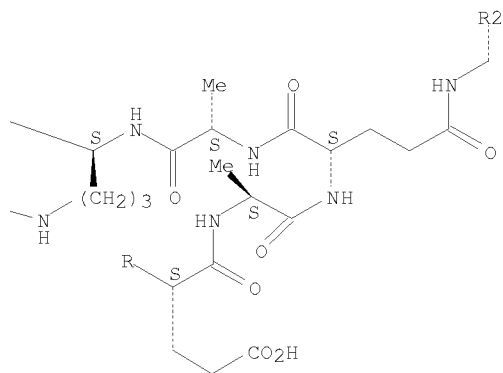
PAGE 3-A



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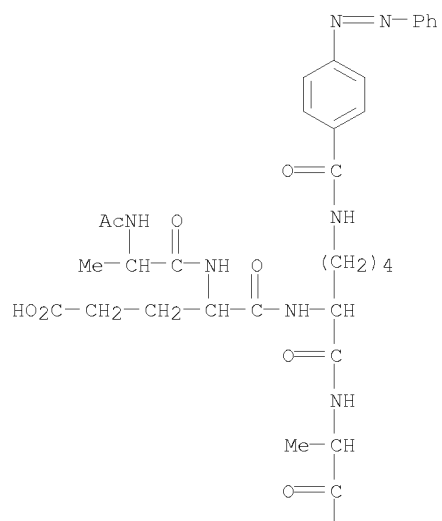
PAGE 4-B



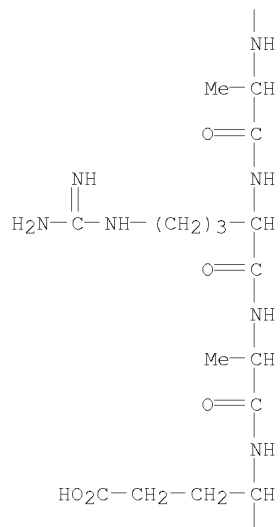
RN 595558-90-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-histidyl-L-alanyl-L-alanyl-L-arginyl-(9CI) (CA INDEX NAME)

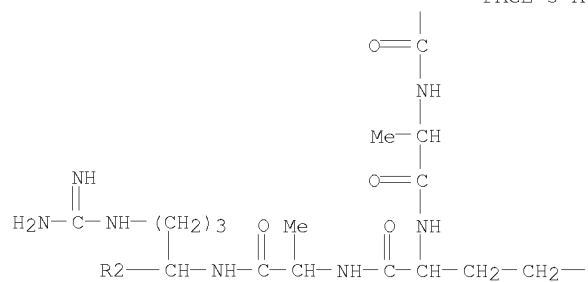
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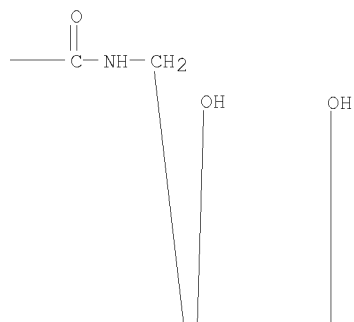
PAGE 2-A



PAGE 3-A



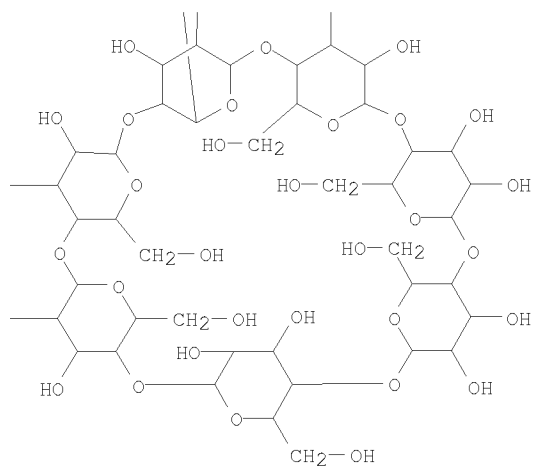
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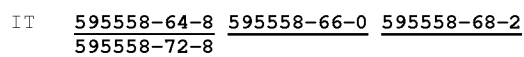


PAGE 4-A

 $\text{HO}-$  $\text{HO}-$ 

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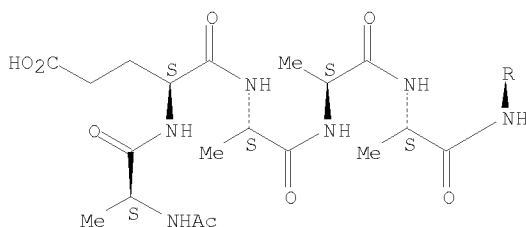




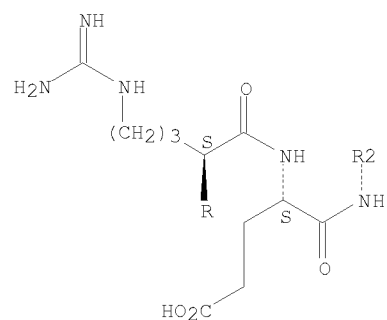
(helix content and stabilization of cyclodextrin-oligopeptide conjugates containing cis-trans azobenzene as measured by CD spectra)

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

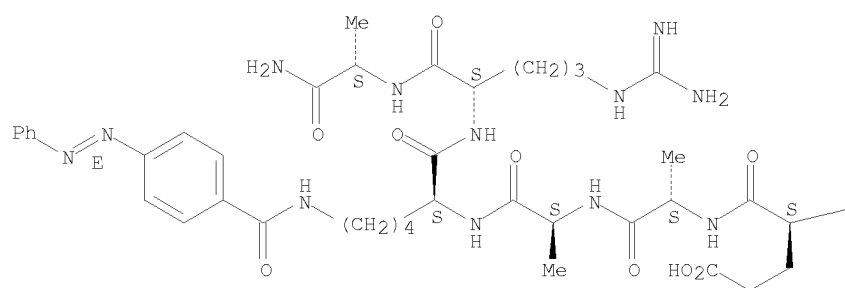
PAGE 1-A



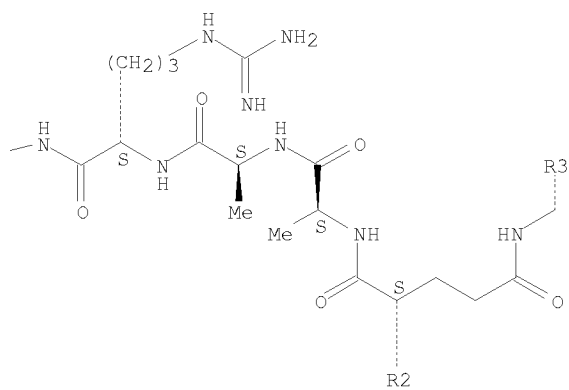
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PAGE 4-A



PAGE 4-B



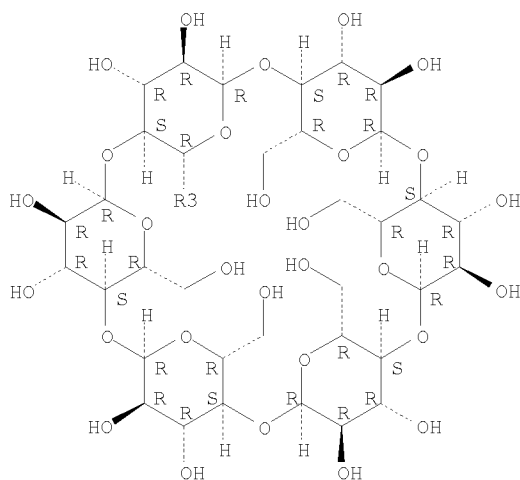
RN 595558-66-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

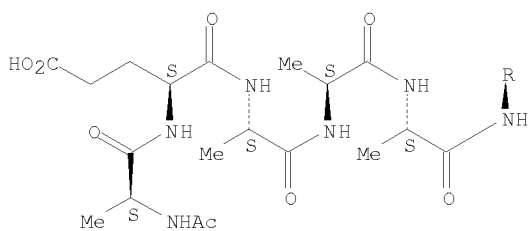
Absolute stereochemistry.

Double bond geometry as shown.

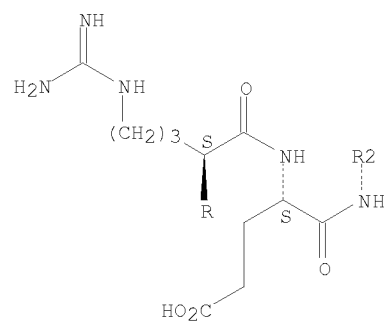
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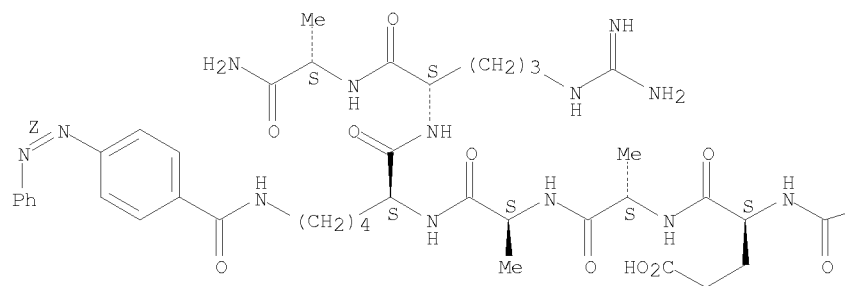


PAGE 2-A

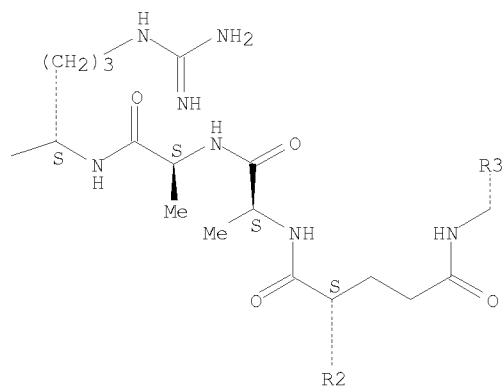


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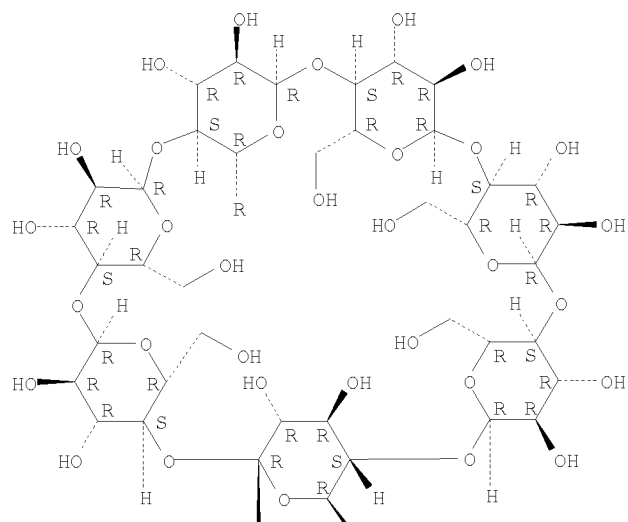
PAGE 4-B



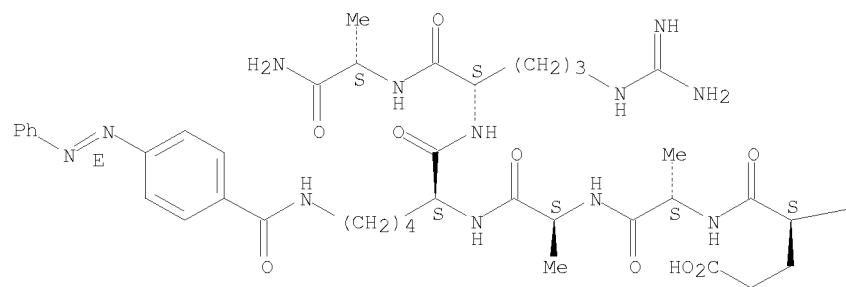
CN 3-**L-Alaninamide**, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
alanyl-L-arginyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-  
L-glutamyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-  
alanyl-N6-[4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

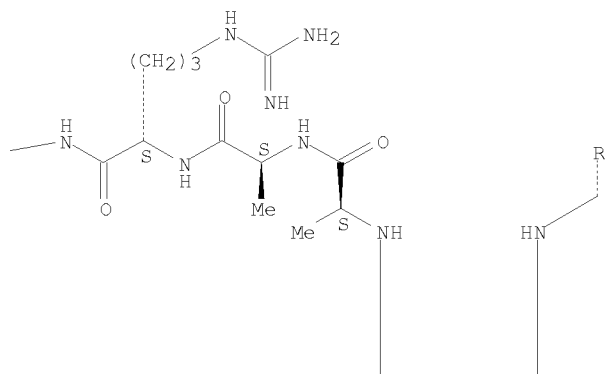
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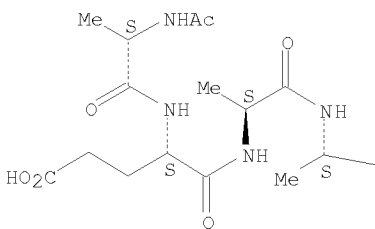
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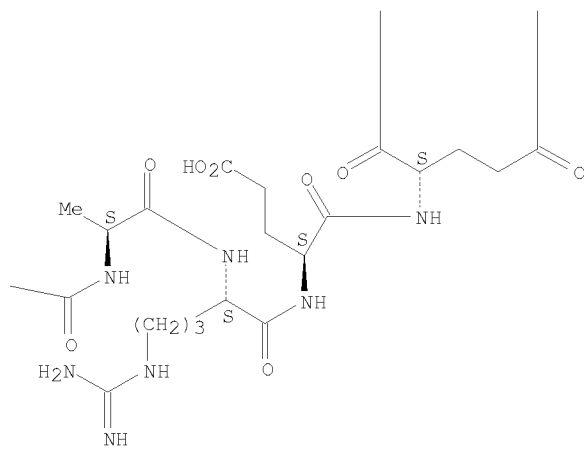
PAGE 2-B



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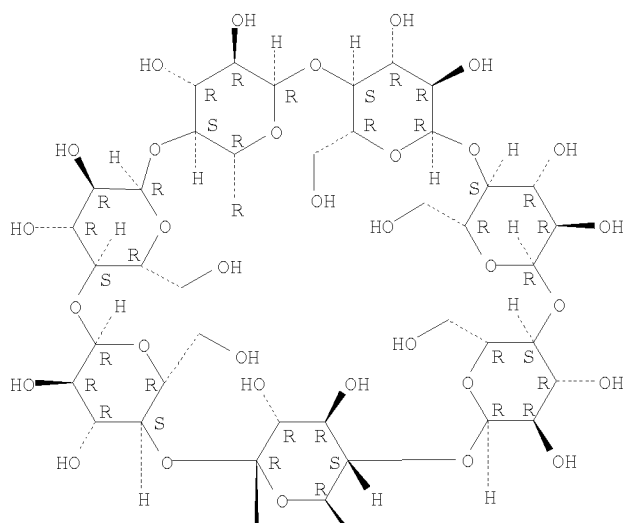


RN 595558-72-8 CAPLUS

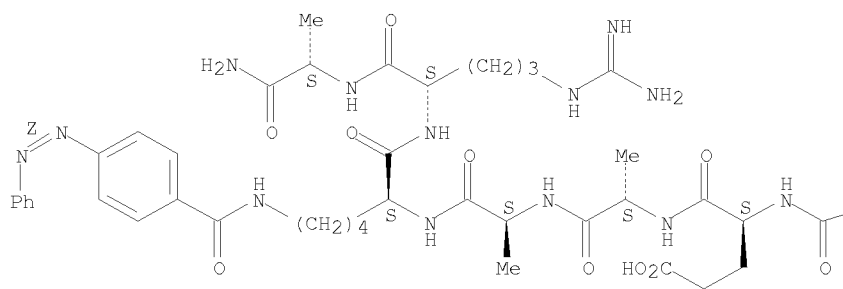
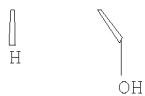
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

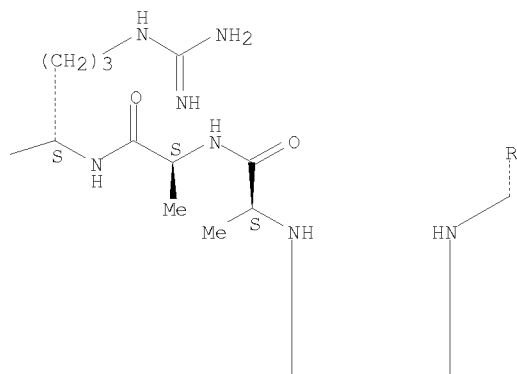
Absolute stereochemistry.  
Double bond geometry as shown.

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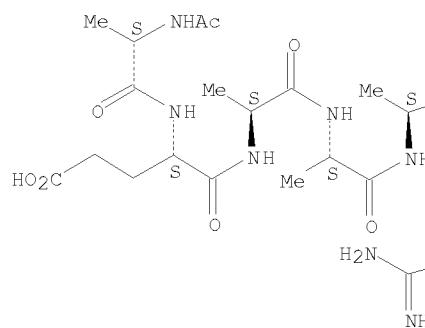


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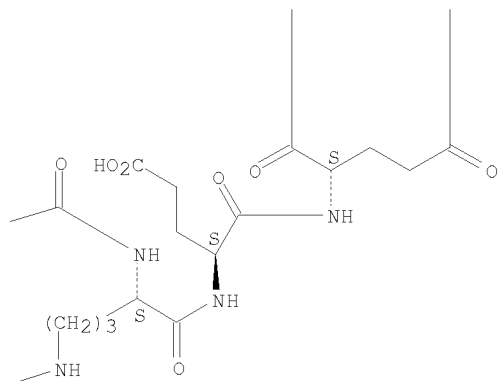




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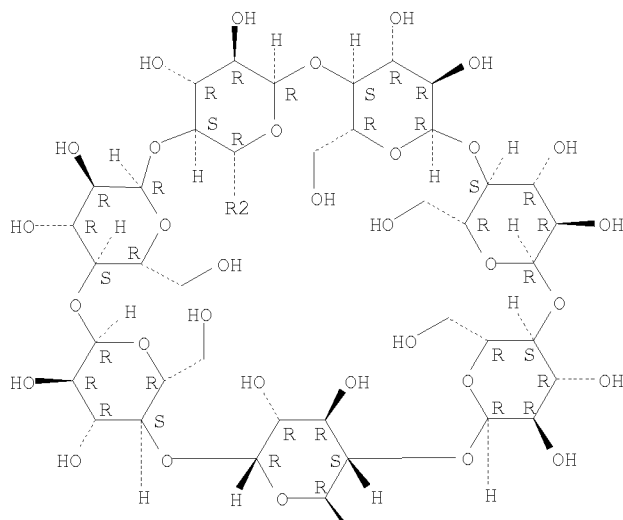


IT 595558-83-1 595558-84-2  
 RL: CAT (Catalyst use); PRP (Properties); USES (Uses)  
 (hydrolysis catalytic activity of)  
 RN 595558-83-1 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-

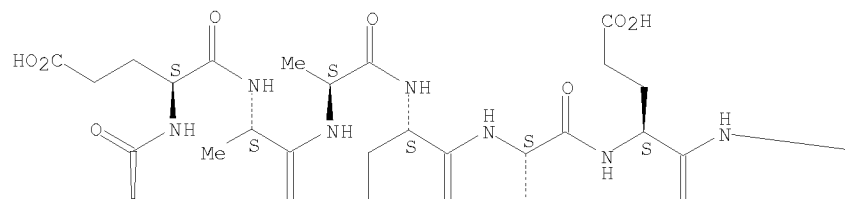
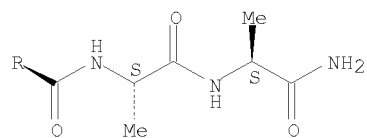
histidyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -  
cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-  
[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-  
(9CI) (CA INDEX NAME)

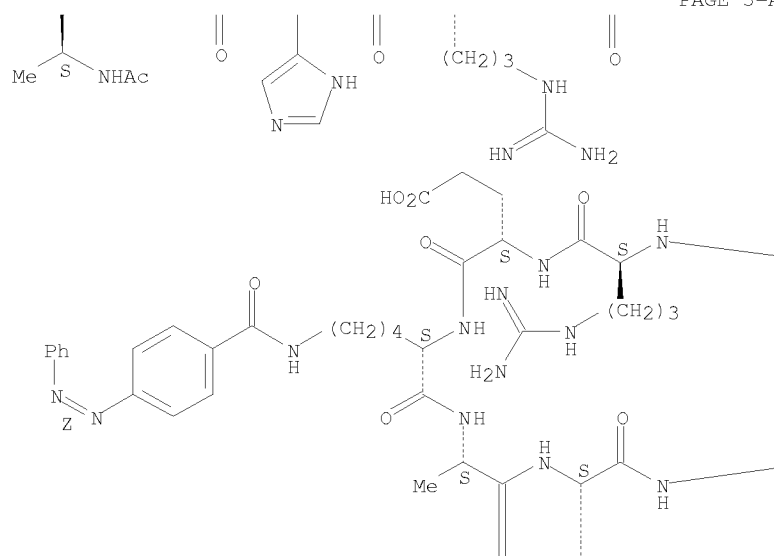
Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A

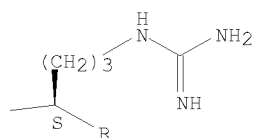
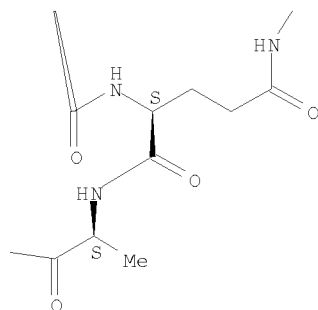


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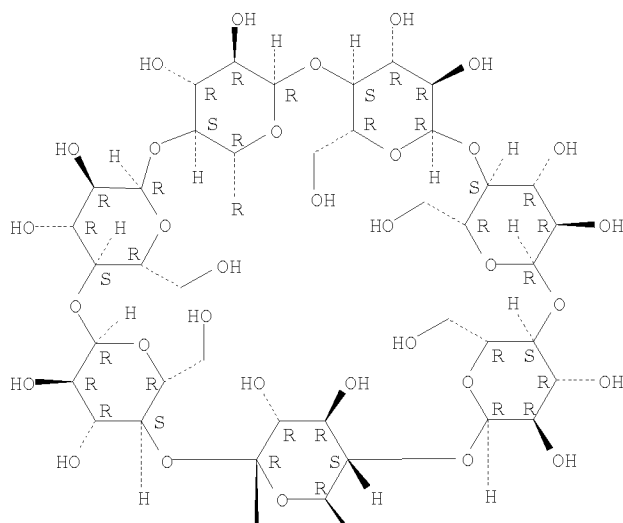
PAGE 4-A

RN 595558-84-2 CAPLUS

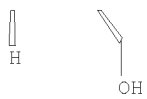
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-histidyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

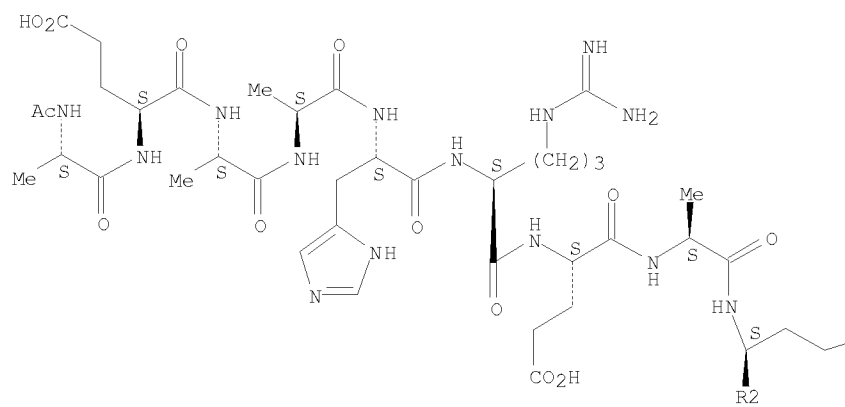
PAGE 1-A



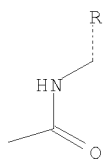
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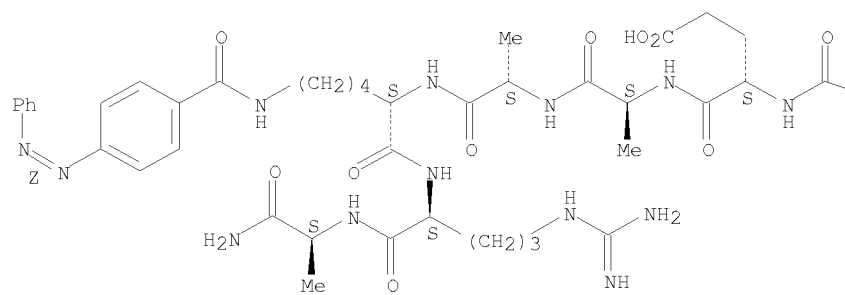
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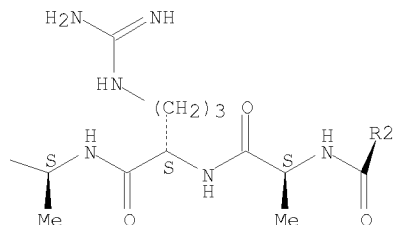


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REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:491950 CAPLUS

DOCUMENT NUMBER: 140:59843

TITLE: Synthesis and characterization of mannosyl mimetic derivatives based on a  $\beta$ - cyclodextrin core

AUTHOR(S): Yockot, Duplex; Moreau, Vincent; Demailly, Gilles; Djedaini-Pilard, Florence

CORPORATE SOURCE: Laboratoire des glucides, Universite Picardie Jules Verne, Amiens, 80039, Fr.

SOURCE: Organic & Biomolecular Chemistry (2003), 1(10), 1810-1818

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:59843

AB The synthesis of branched  $\beta$ - cyclodextrins substituted with mannosyl mimetic derivs. at one primary hydroxy group is described. It was shown that the self-inclusion phenomenon observed for the target compds. in water did not preclude the inclusion properties of the cyclodextrin moiety.

IT 639464-24-7P 639464-25-8P

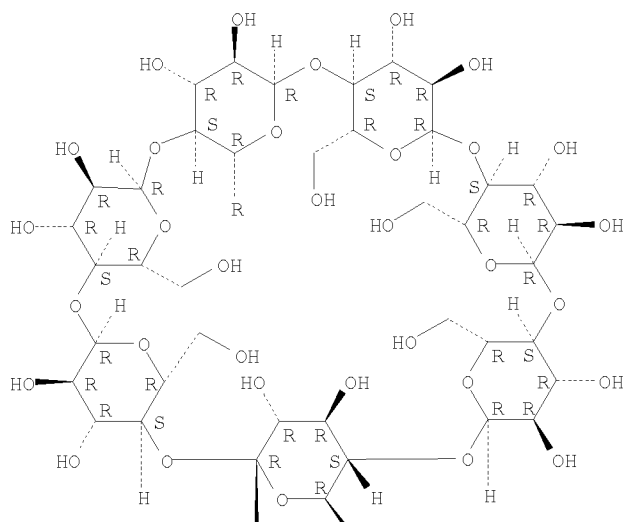
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis, water solubility, and characterization of mannosyl mimetic derivs. based on bcyclodextrin core)

RN 639464-24-7 CAPLUS

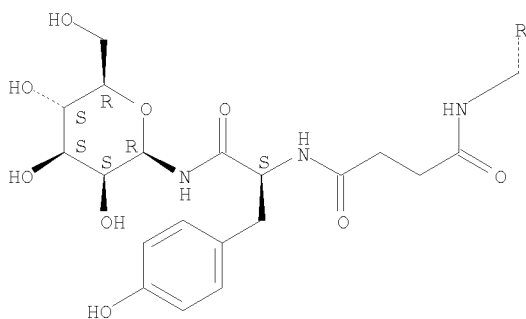
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-( $\beta$ -D-mannopyranosylamino)-2-oxoethyl]amino]-1,4-dioxobutyl]amino]-9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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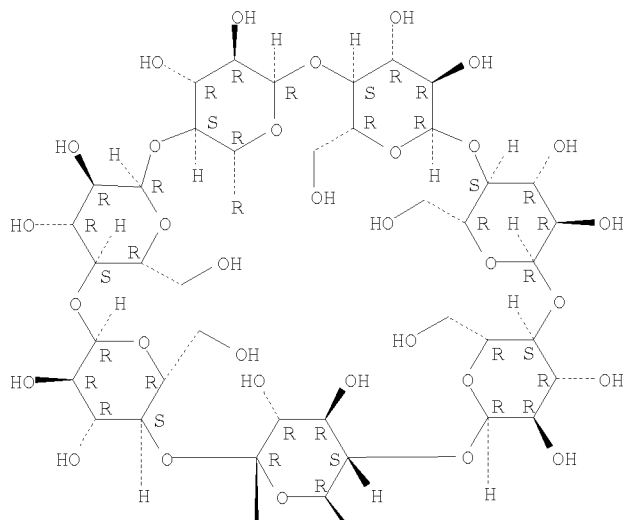


RN 639464-25-8 CAPLUS

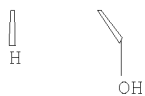
CN **β**-Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-[(O-**α**-D-mannopyranosyl-(1→3)-O-**α**-D-mannopyranosyl-(1→6)]-**β**-D-mannopyranosyl)amino]-2-oxoethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

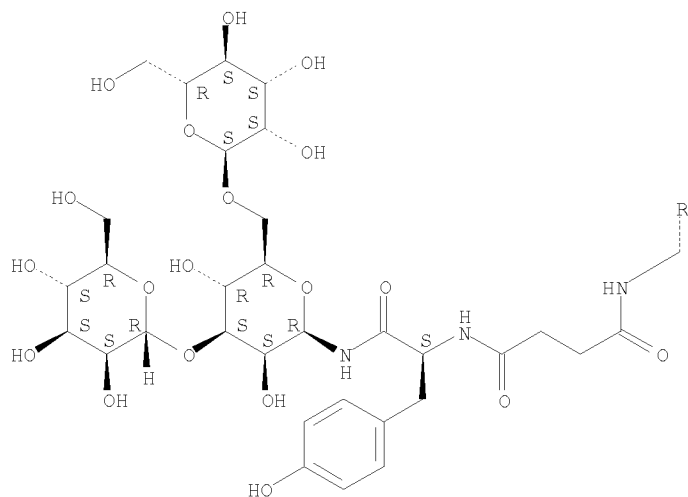
PAGE 1-A



PAGE 2-A



PAGE 3-A



IT **639464-27-0P 639464-31-6P 639464-32-7P**  
**639464-33-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

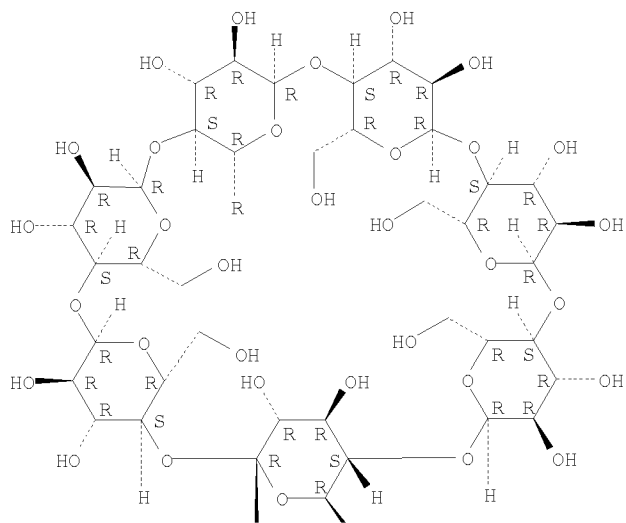
(synthesis, water solubility, and characterization of mannosyl mimetic derivs. based on cyclodextrin core)

RN 639464-27-0 CAPLUS

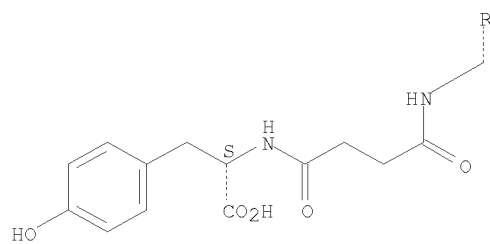
CN L-Tyrosine, N-[4-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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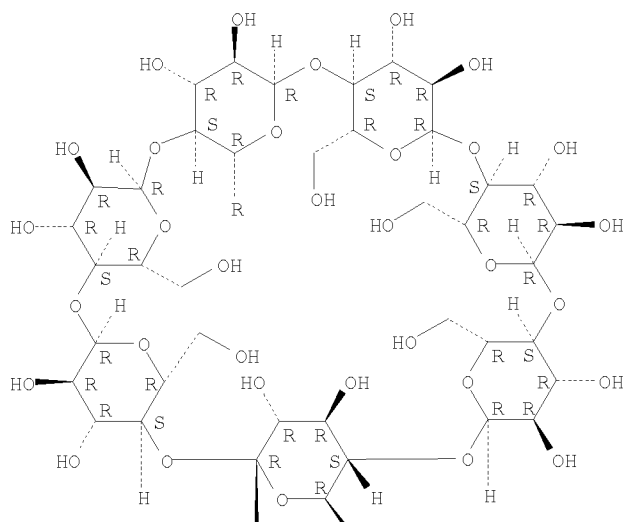


RN 639464-31-6 CAPLUS

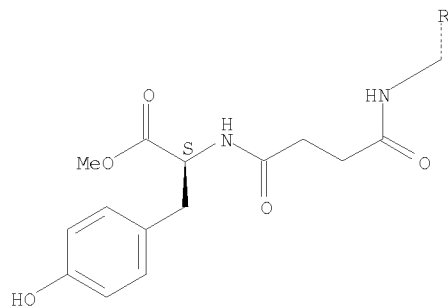
CN L-Tyrosine, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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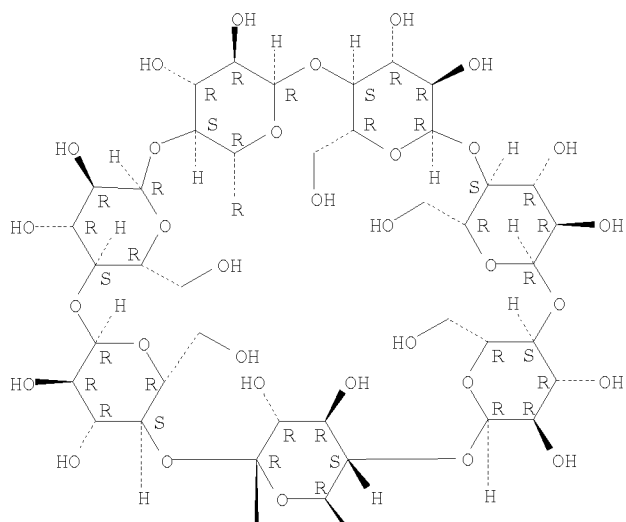


RN 639464-32-7 CAPLUS

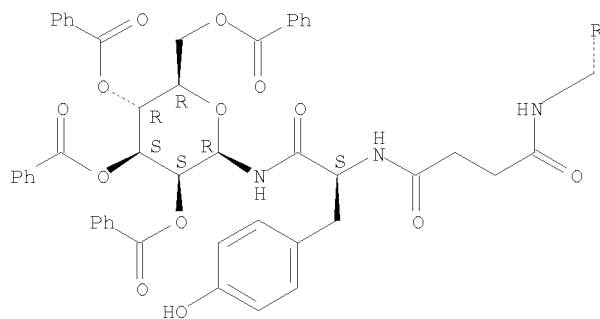
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-oxo-2-[(2,3,4,6-tetra-O-benzoyl- $\beta$ -D-mannopyranosyl)amino]ethyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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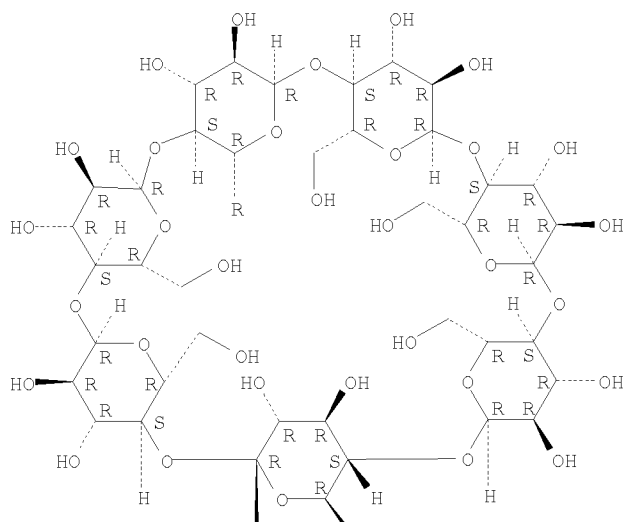


RN 639464-33-8 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[(1S)-1-[(4-hydroxyphenyl)methyl]-2-oxo-2-[(0-2,3,4,6-tetra-O-acetyl- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[2,3,4,6-tetra-O-acetyl- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 6)]-2,4-di-O-benzoyl- $\beta$ -D-mannopyranosyl)amino]ethyl]amino]-1,4-dioxobutyl]amino]-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

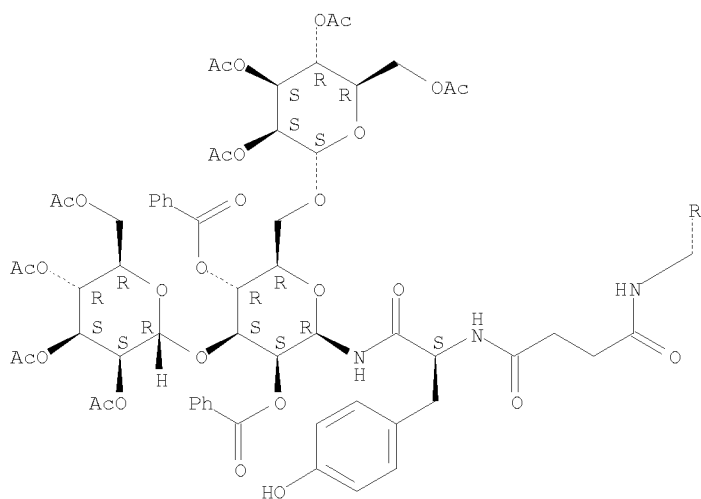
PAGE 1-A



PAGE 2-A



PAGE 3-A



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:236932 CAPLUS  
 DOCUMENT NUMBER: 138:411188  
 TITLE: Sensing behavior of fluorescent cyclodextrin /peptide hybrids bearing a macrocyclic metal complex  
 AUTHOR(S): Furukawa, Shuntaro; Mihara, Hisakazu; Ueno, Akihiko  
 CORPORATE SOURCE: Department of Bioengineering, Tokyo Institute of

Technology, Graduate School of Bioscience and  
 Biotechnology, Yokohama, 226-8501, Japan  
 SOURCE: Macromolecular Rapid Communications (2003), 24(2),  
 202-206  
 CODEN: MRCOE3; ISSN: 1022-1336  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Two kinds of cyclodextrin/peptide (CD/peptide) hybrids bearing  
 ZnII-cyclen or cyclen, dansyl and  $\beta$ - cyclodextrin  
 ( $\beta$ -CD) units were synthesized as chemosensors for organic anionic mols.  
 ZnII-cyclen serves as a ligand site and  $\beta$ -CD is a receptor site for  
 guest mols., while the dansyl unit acts as a fluorescent probe. Examination of  
 the fluorescence behaviors of these CD/peptides suggested that the hybrid  
 containing Zn<sup>2+</sup> has larger binding consts. with respect to anionic mols. than  
 that without Zn<sup>2+</sup>.

IT 530105-09-0 530105-15-8 530105-21-6  
530105-26-1 530105-31-8 530105-36-3  
530105-40-9 530105-43-2 530135-56-9  
530135-69-4 530135-74-1 530135-78-5  
530135-79-6 530135-80-9 530136-00-6  
530136-13-1

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,  
 nonpreparative)

(formation and binding constant of)

RN 530105-09-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-  
 [[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-  
 alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[(1,4,7,10-  
 tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-  
 arginyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol ion(1-) (1:1) (9CI)  
 (CA INDEX NAME)

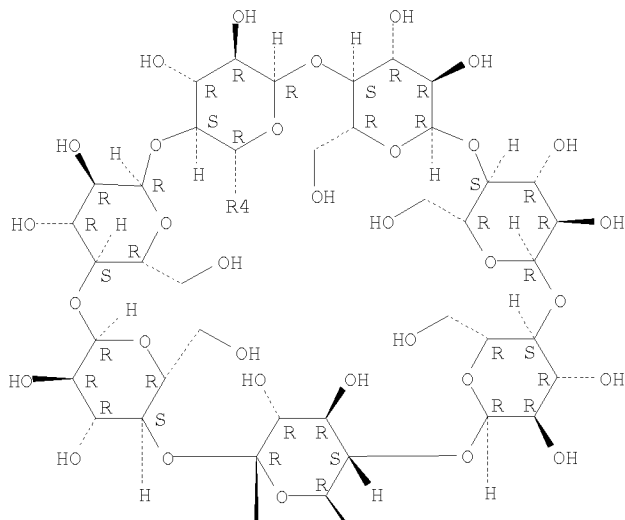
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CRN 530104-90-6

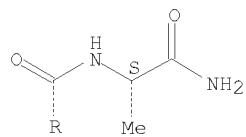
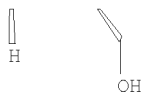
CMF C144 H238 N36 O65 S

Absolute stereochemistry.

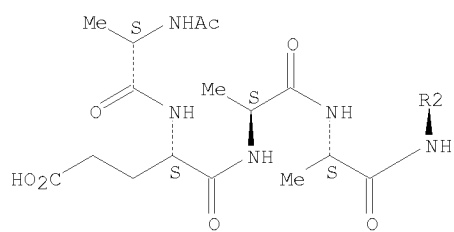
PAGE 1-A



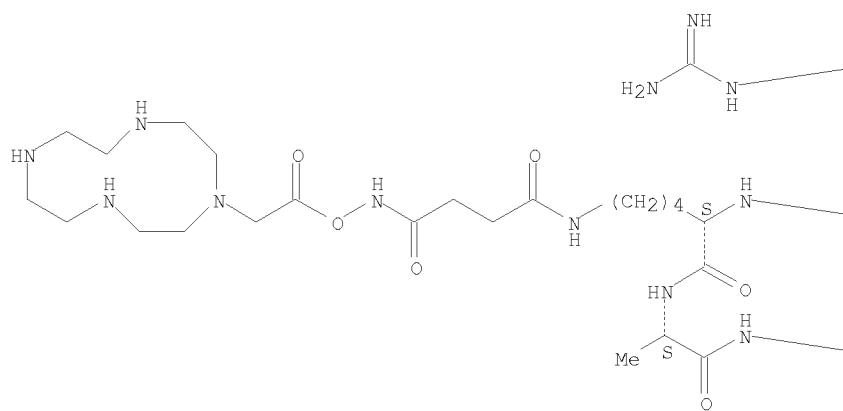
PAGE 2-A



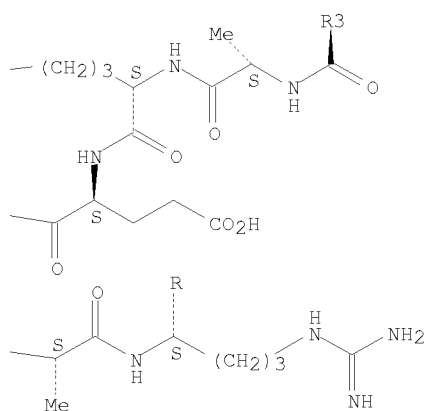
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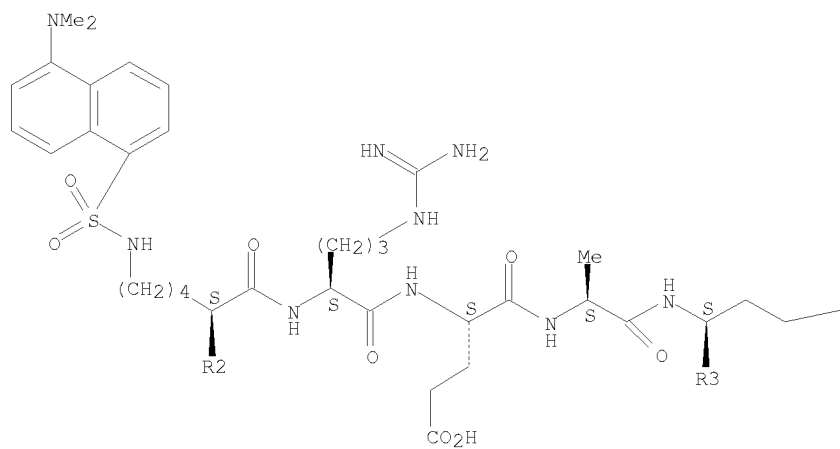
PAGE 4-A



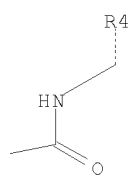
PAGE 4-B



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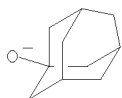


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CM 2

CRN 157774-37-3  
CMF C10 H15 O



RN 530105-15-8 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol ion(1-) (1:1) (9CI) (CA INDEX NAME)

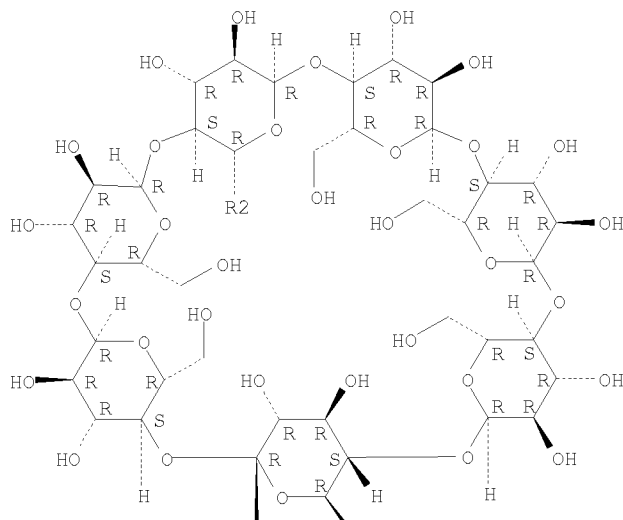
CM 1

CRN 530104-95-1

CMF C144 H238 N36 O65 S

Absolute stereochemistry.

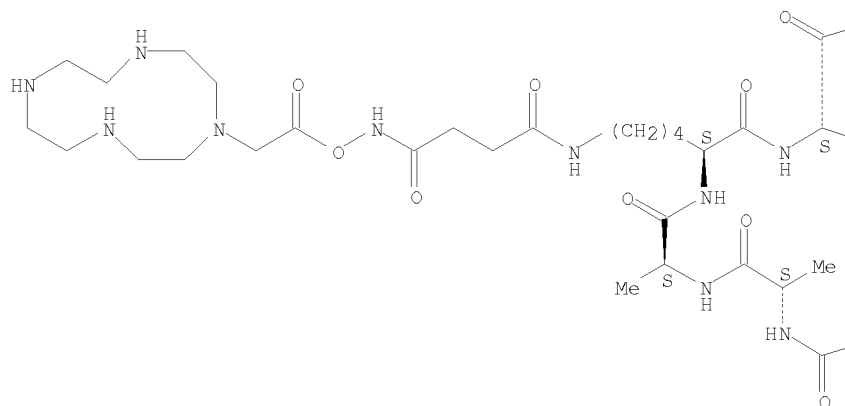
PAGE 1-A



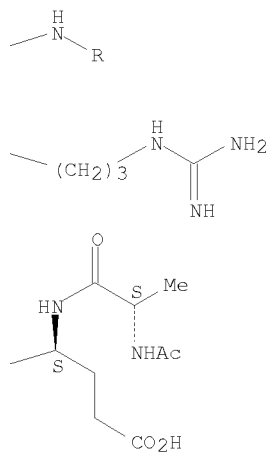
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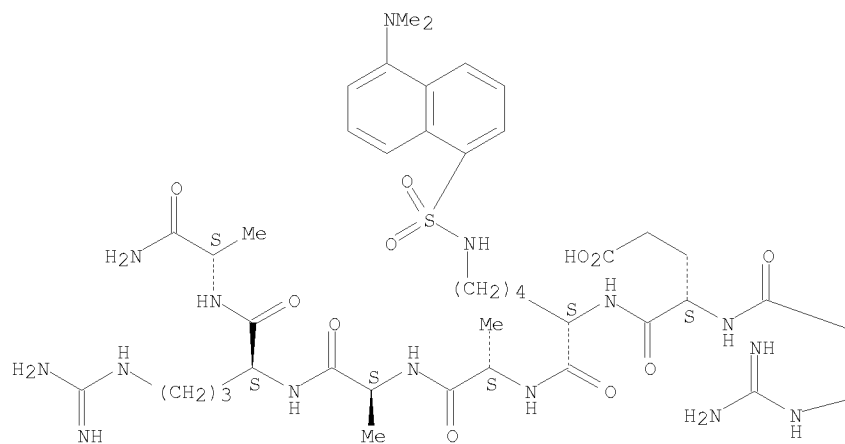
PAGE 3-A

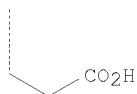
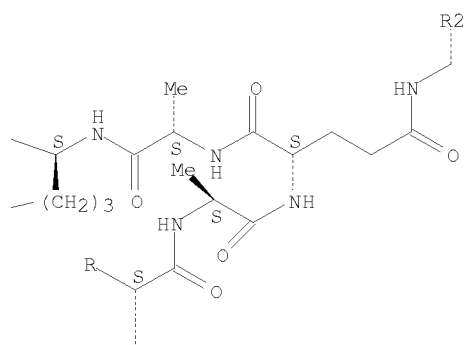


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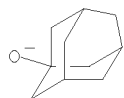




CM 2

CRN 157774-37-3

CMF C10 H15 O



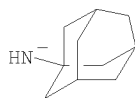
RN 530105-21-6 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-  
 [[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-  
 alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[(1,4,7,10-  
 tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-  
 arginyl-, compd. with tricyclo[3.3.1.3,7]decan-1-amine ion(1-) (1:1)  
 (9CI) (CA INDEX NAME)

CM 1

CRN 530105-20-5

CMF C10 H16 N



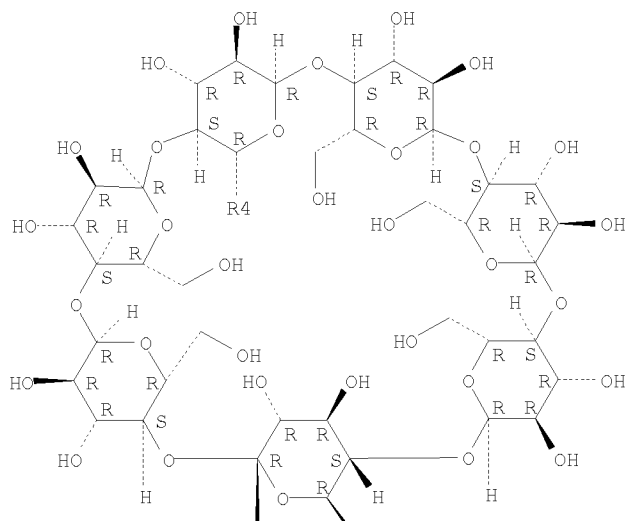
CM 2

10576346

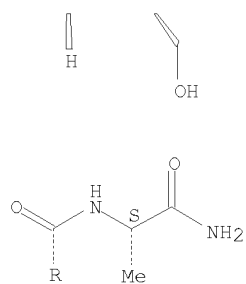
CRN 530104-90-6  
CMF C144 H238 N36 O65 S

Absolute stereochemistry.

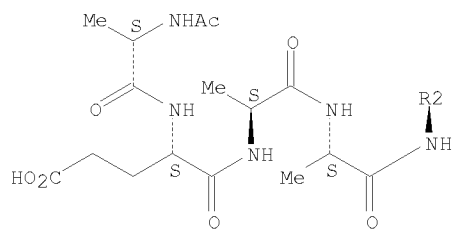
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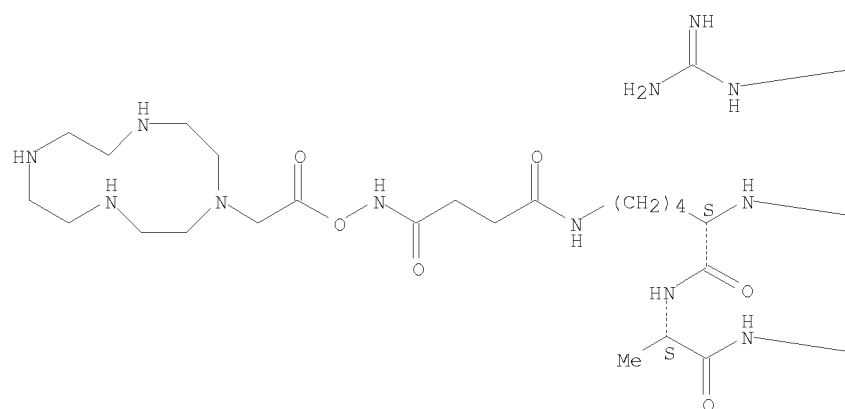
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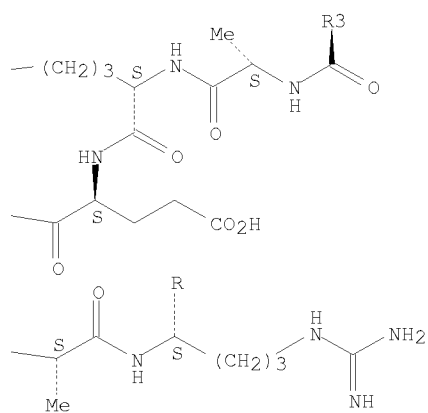
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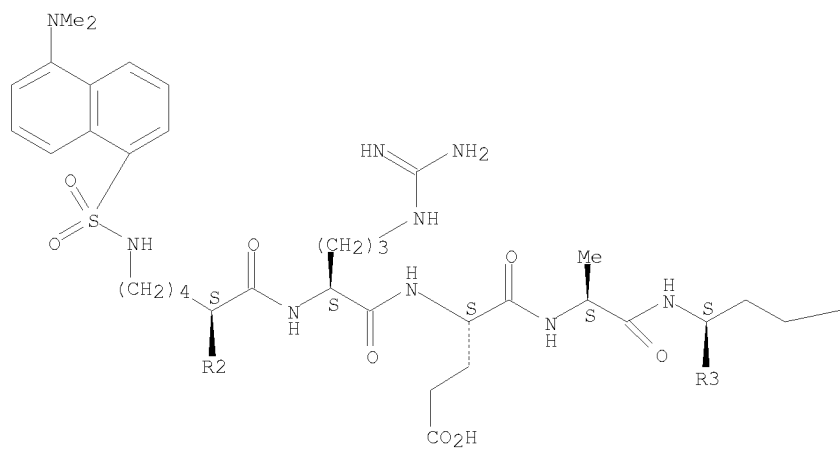
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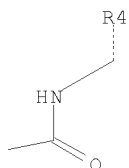


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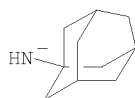




RN 530105-26-1 CAPLUS  
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 (9CI) (CA INDEX NAME)

CM 1

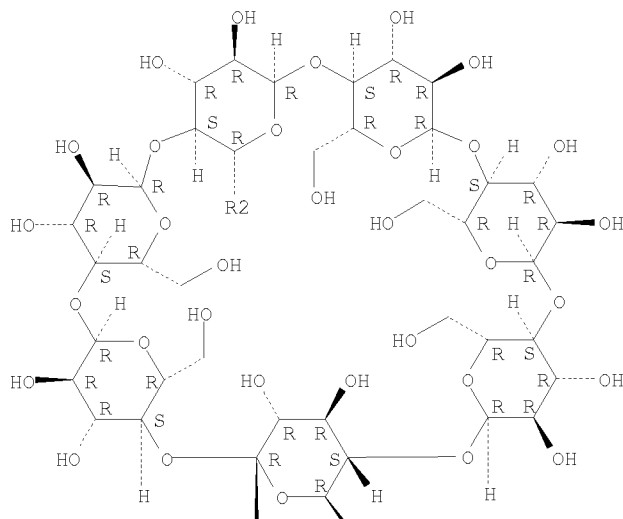
CRN 530105-20-5  
 CMF C10 H16 N



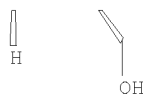
CM 2

CRN 530104-95-1  
 CMF C144 H238 N36 O65 S

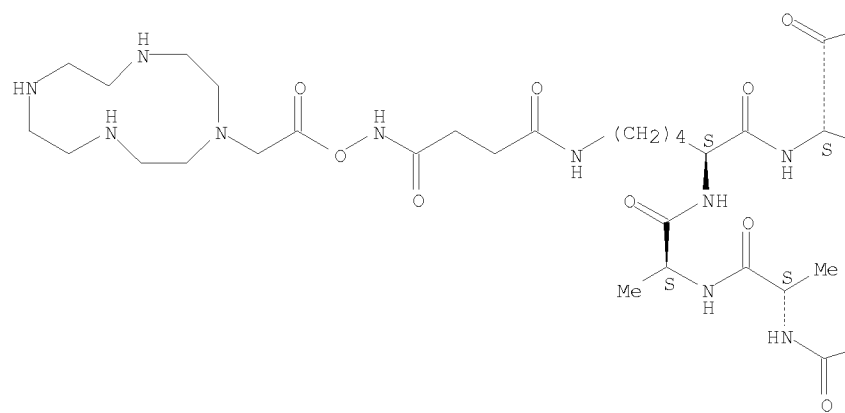
Absolute stereochemistry.



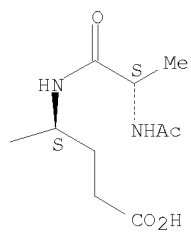
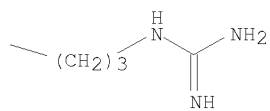
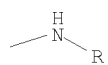
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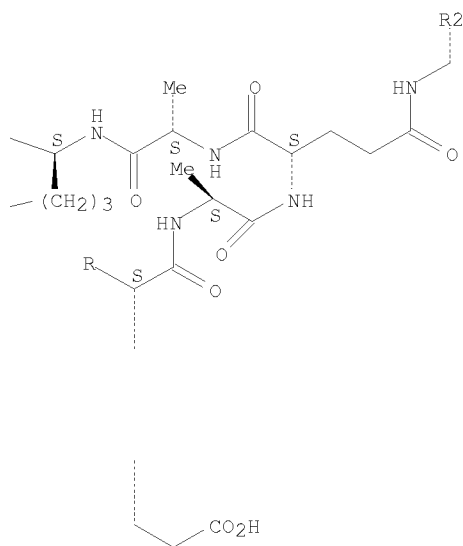
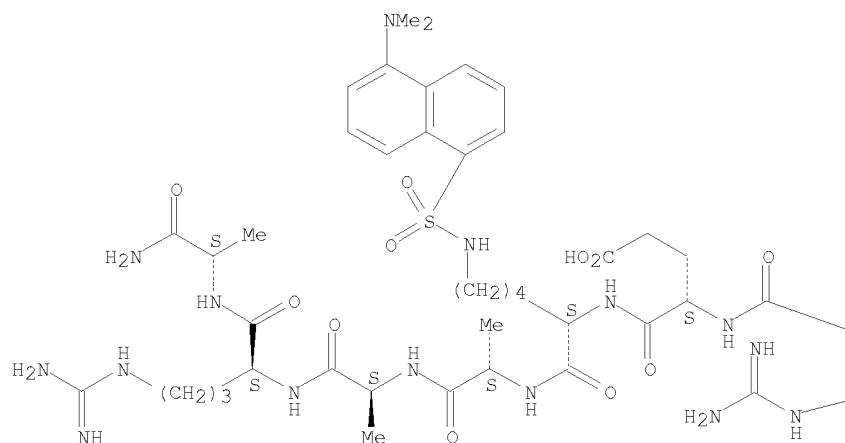


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RN 530105-31-8 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-  
 [[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-L-  
 alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-  
 tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-  
 arginyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid ion(1-)  
 (1:1) (9CI) (CA INDEX NAME)

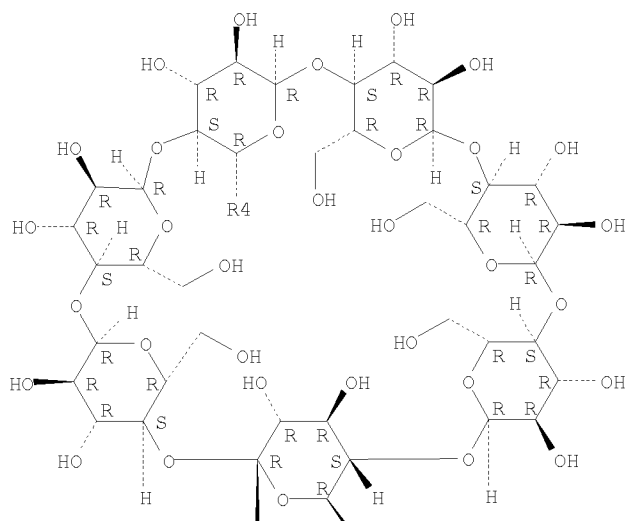
CM 1

CRN 530104-90-6

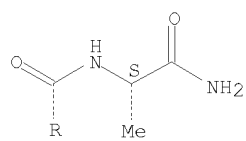
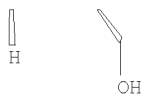
CMF C144 H238 N36 O65 S

Absolute stereochemistry.

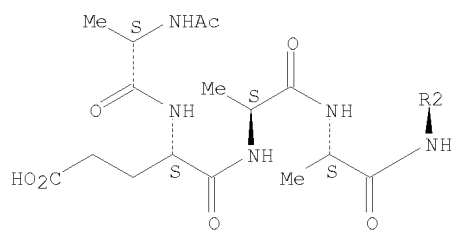
PAGE 1-A



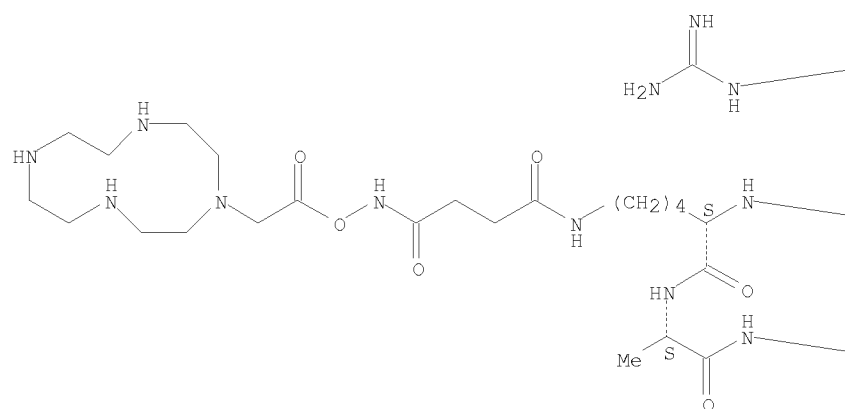
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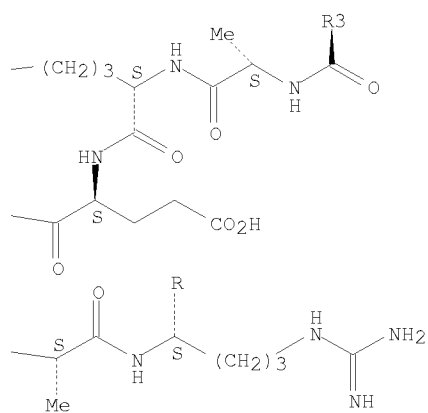
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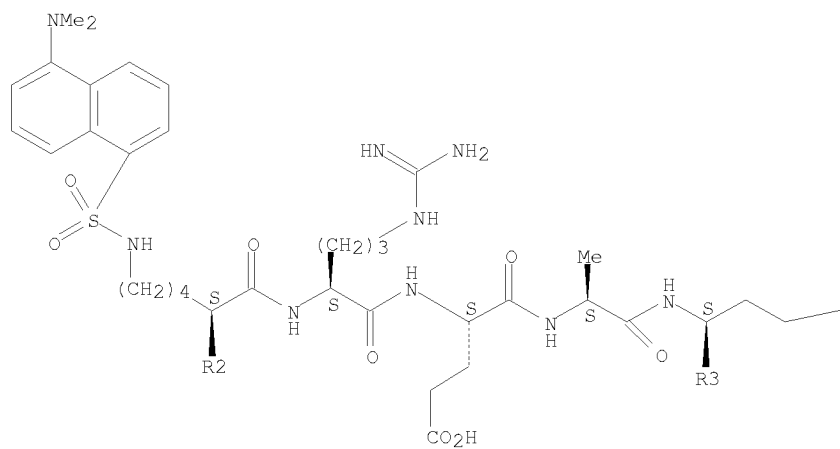
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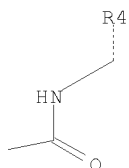


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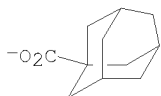
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CM 2

CRN 65012-54-6  
CMF C11 H15 O2



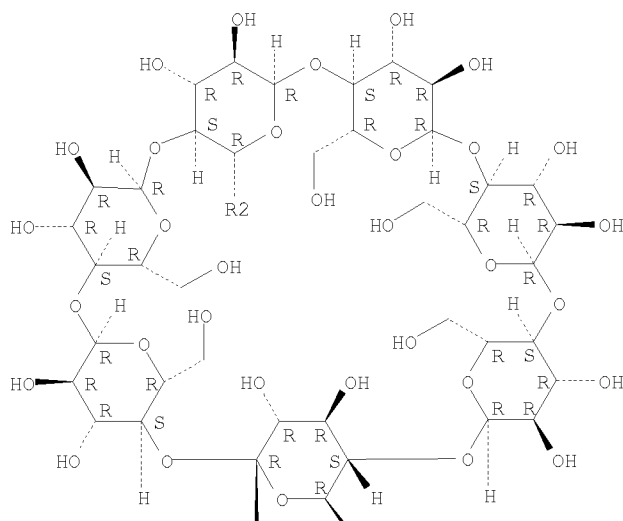
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CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-, compd. with tricyclo[3.3.1.3,7]decane-1-carboxylic acid ion(1-)(1:1) (9CI) (CA INDEX NAME)

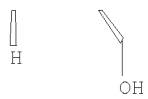
CM 1

CRN 530104-95-1  
CMF C144 H238 N36 O65 S

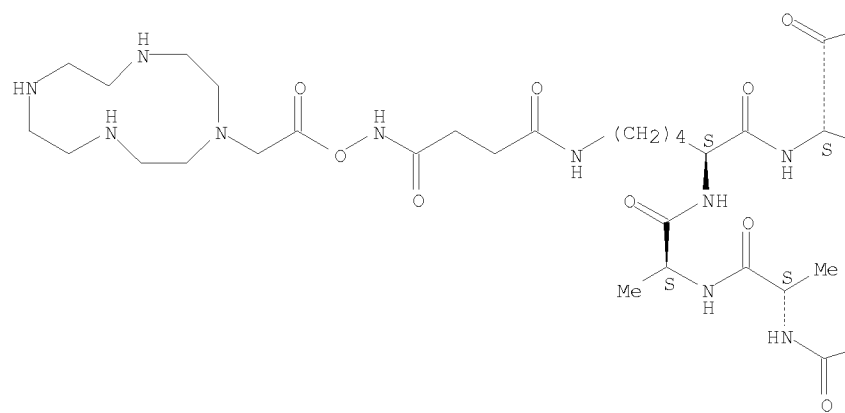
Absolute stereochemistry.



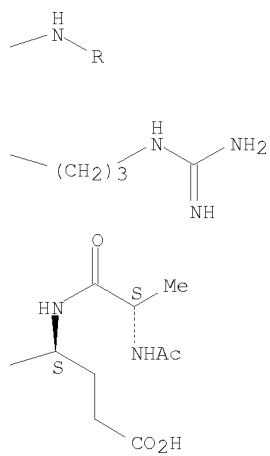
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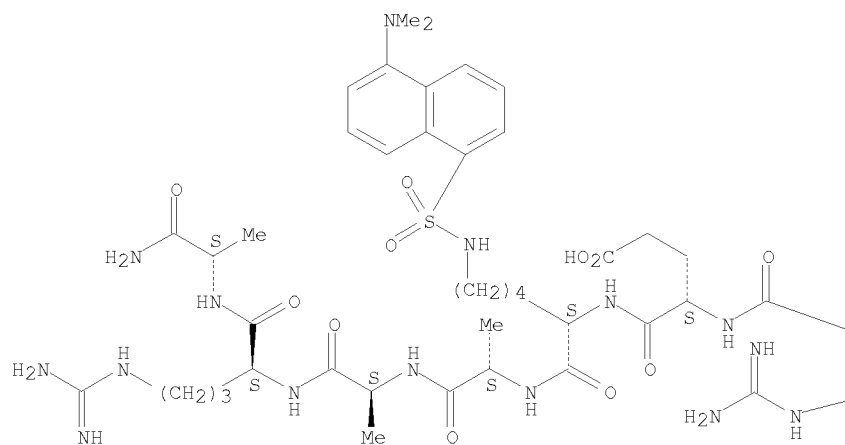
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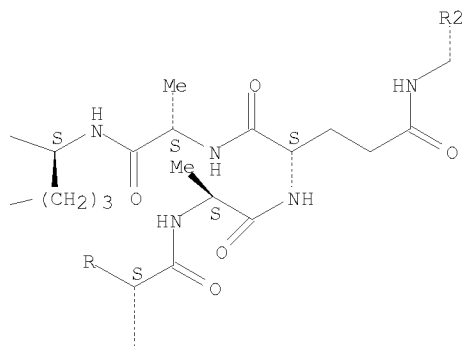
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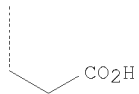
PAGE 4-A



PAGE 4-B

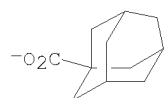


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CM 2

CRN 65012-54-6  
CMF C11 H15 O2



RN 530105-40-9 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-  
 [[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-  
 alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[1,4,7,10-  
 tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-alanyl-L-  
 arginyl-, compd. with (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-3,7-dihydroxycholan-24-  
 oic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

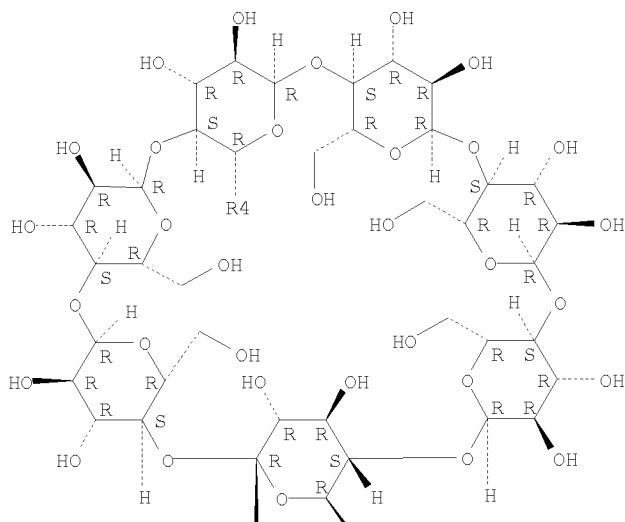
CM 1

CRN 530104-90-6

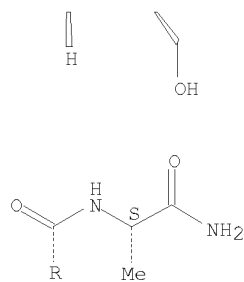
CMF C144 H238 N36 O65 S

Absolute stereochemistry.

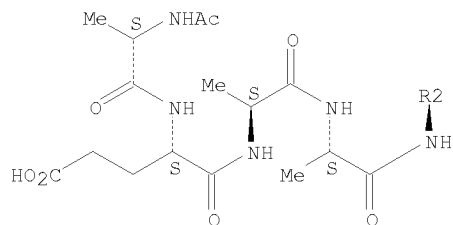
PAGE 1-A



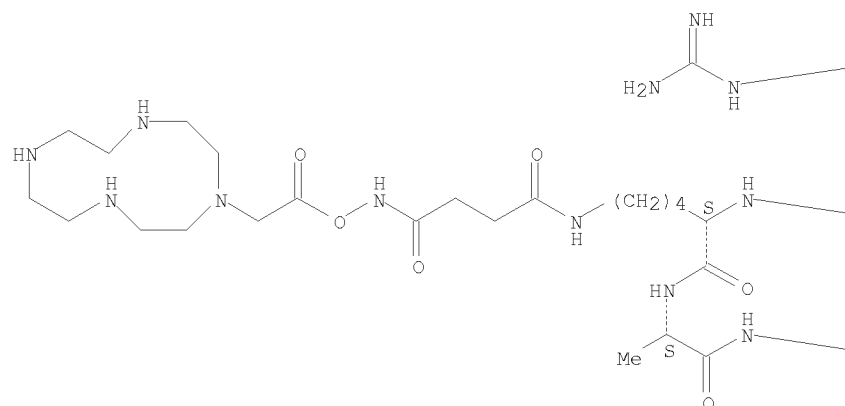
PAGE 2-A



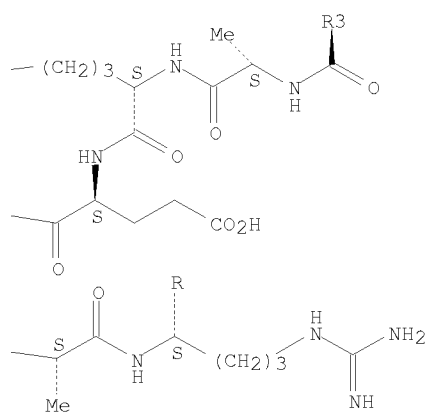
PAGE 3-A



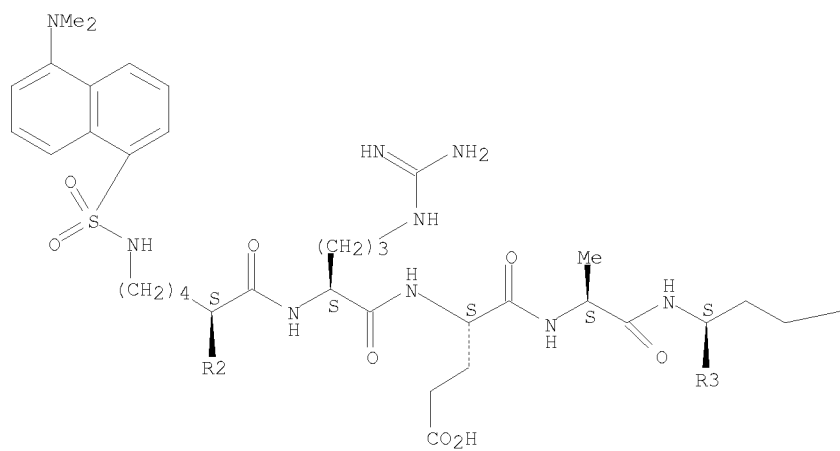
PAGE 4-A



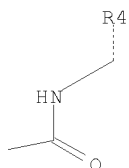
PAGE 4-B



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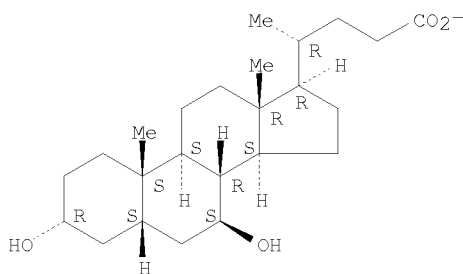


CM 2

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.



RN 530105-43-2 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-ylacetyl)oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-, compd. with (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-3,7-dihydroxycholelan-24-oic acid ion(1-) (1:1) (9CI) (CA INDEX NAME)

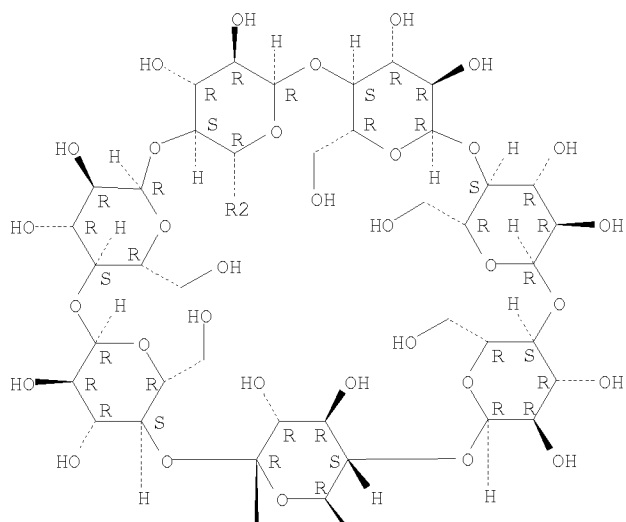
CM 1

CRN 530104-95-1

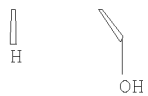
CMF C144 H238 N36 O65 S

Absolute stereochemistry.

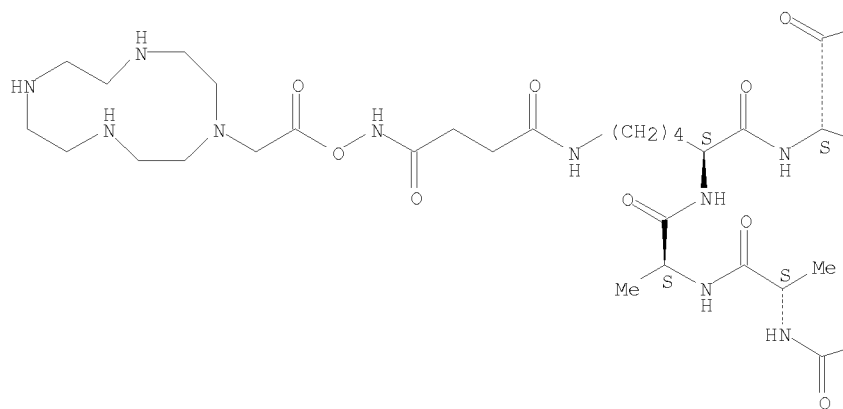
PAGE 1-A

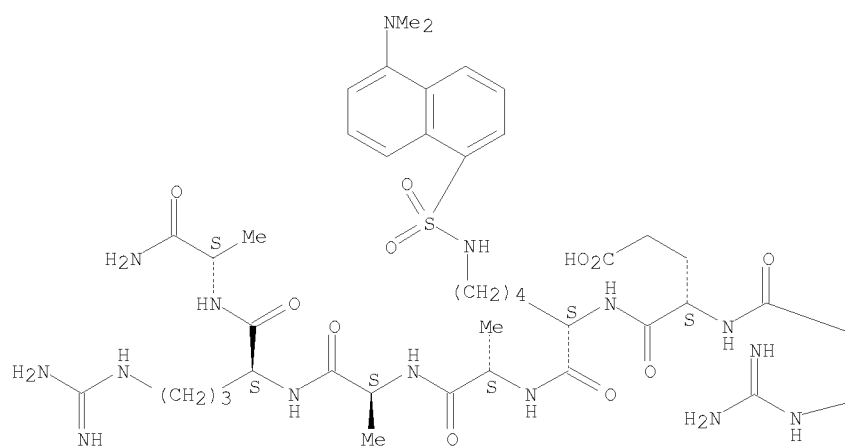
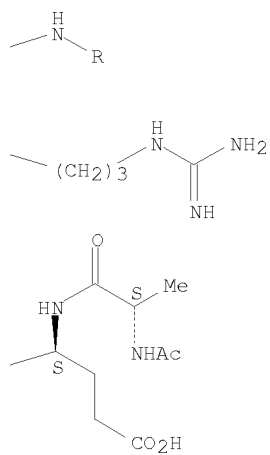


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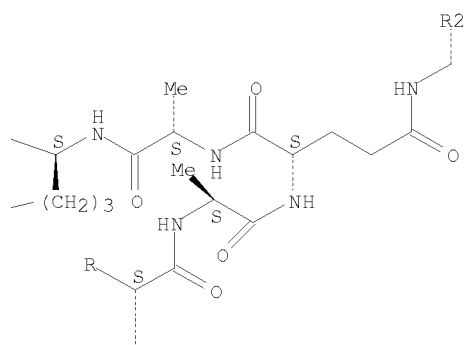


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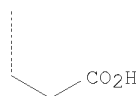




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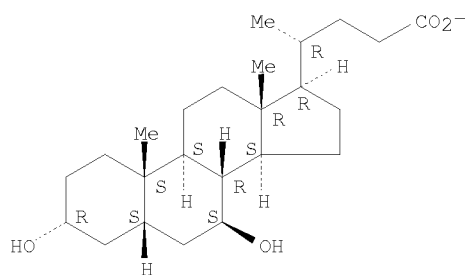


CM 2

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.



RN 530135-56-9 CAPLUS

CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-14)-, salt with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

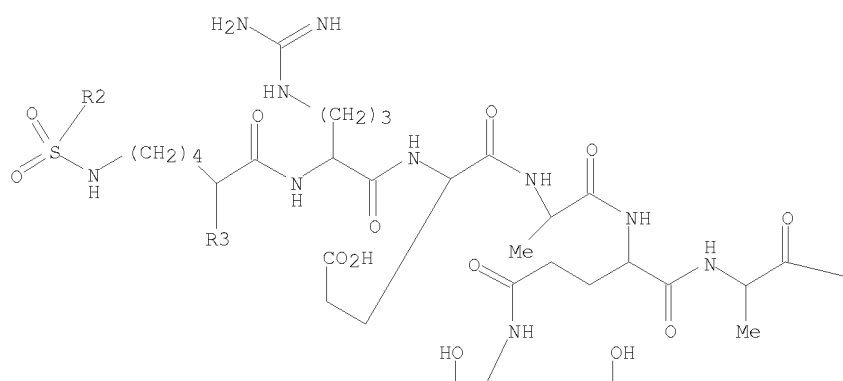
CM 1

CRN 530104-93-9

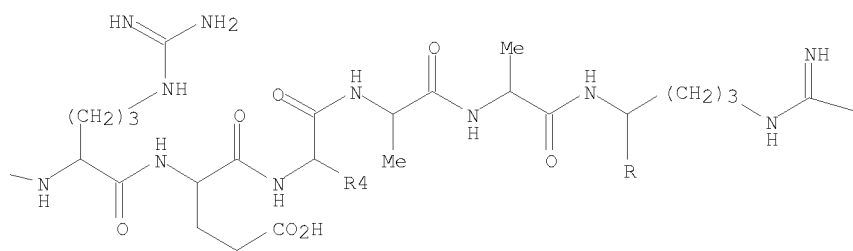
CMF C144 H240 N36 O66 S Zn

CCI CCS

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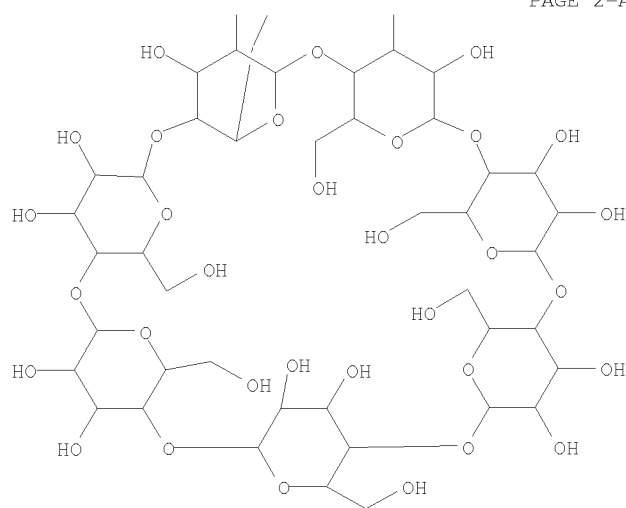
PAGE 1-B



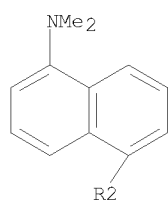
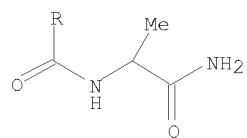
PAGE 1-C



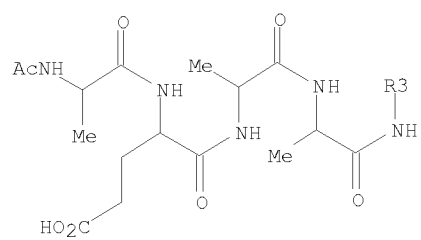
PAGE 2-A

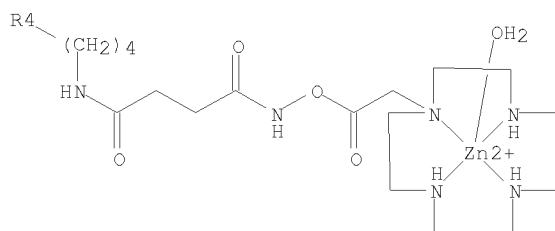


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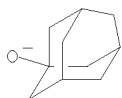




CM 2

CRN 157774-37-3

CMF C10 H15 O



RN 530135-69-4 CAPLUS

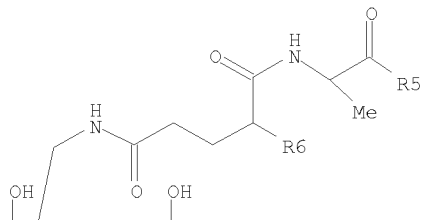
CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-14)-, salt with tricyclo[3.3.1.1.3,7]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

CM 1

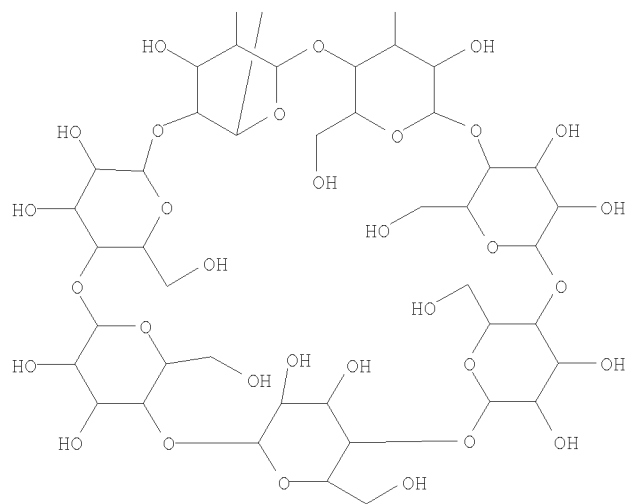
CRN 530104-98-4

CMF C144 H240 N36 O66 S Zn

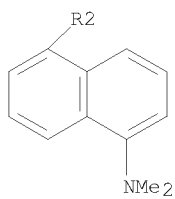
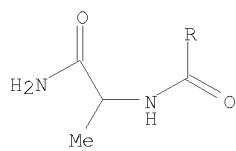
CCI CCS



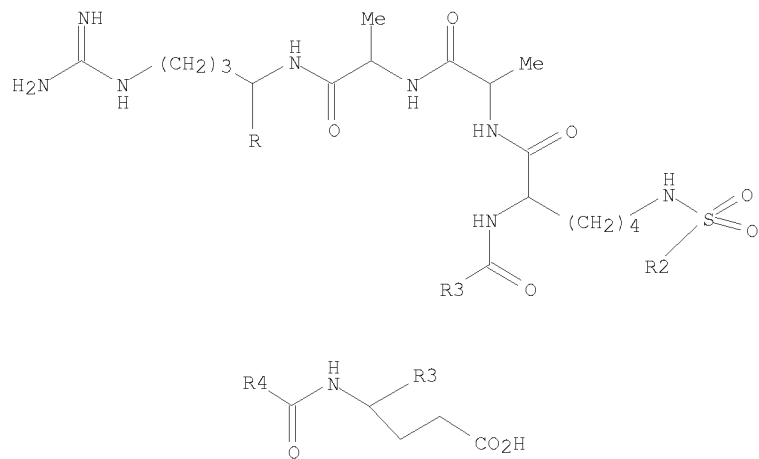
PAGE 2-A



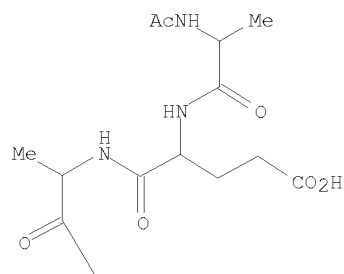
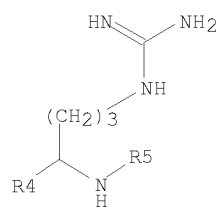
PAGE 3-A



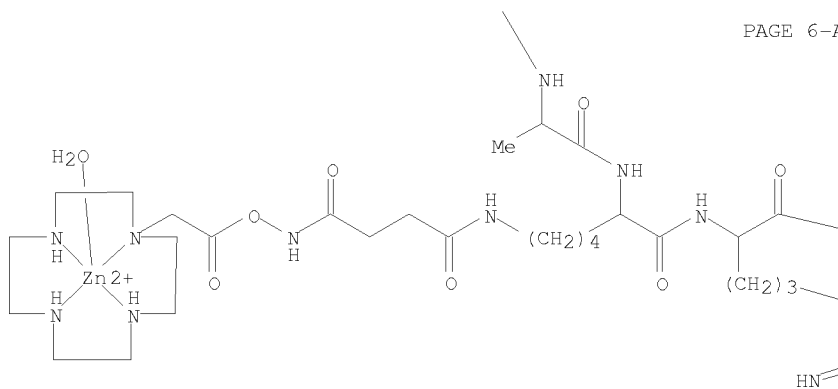
PAGE 4-A



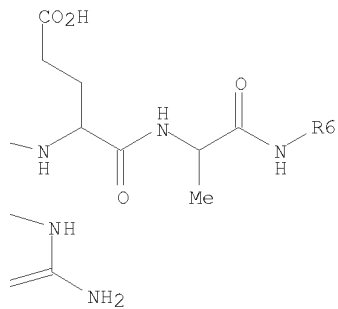
PAGE 5-A



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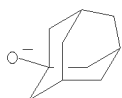


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CM 2

CRN 157774-37-3  
CMF C10 H15 O

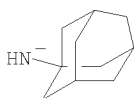


RN 530135-74-1 CAPLUS  
 CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-12)-, salt with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-amine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 530105-20-5

CMF C10 H16 N



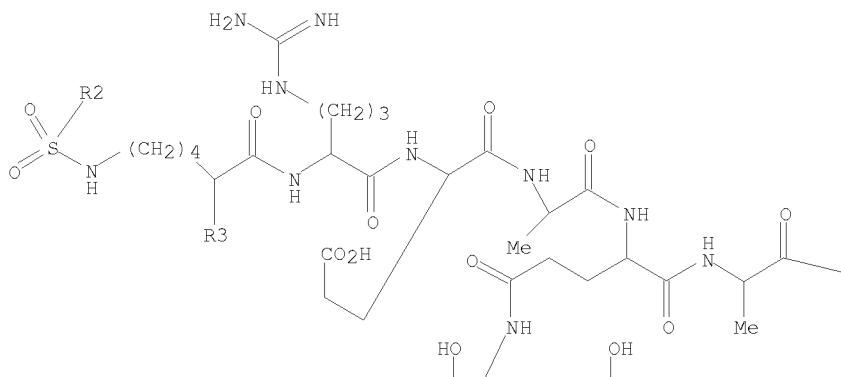
CM 2

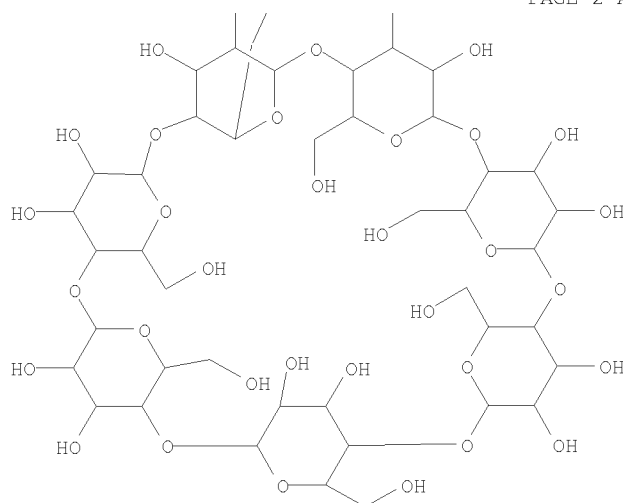
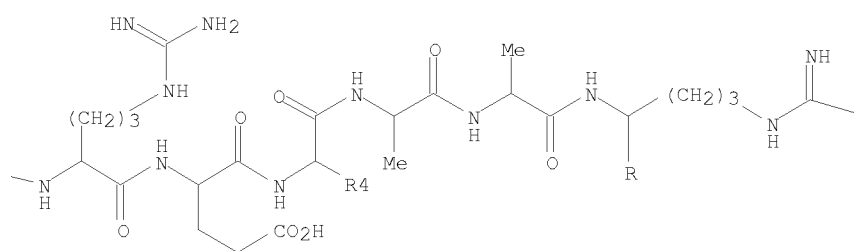
CRN 530104-93-9

CMF C144 H240 N36 O66 S Zn

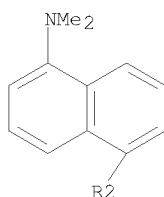
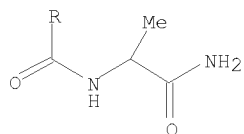
CCI CCS

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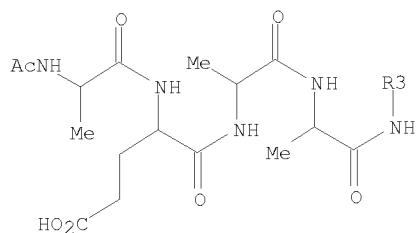




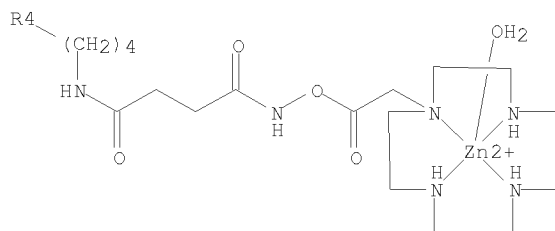
PAGE 3-A



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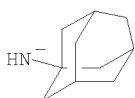
RN 530135-78-5 CAPLUS

CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-12)-, salt with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-amine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 530105-20-5

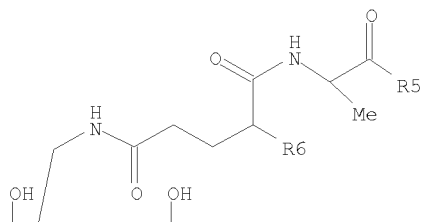
CMF C10 H16 N



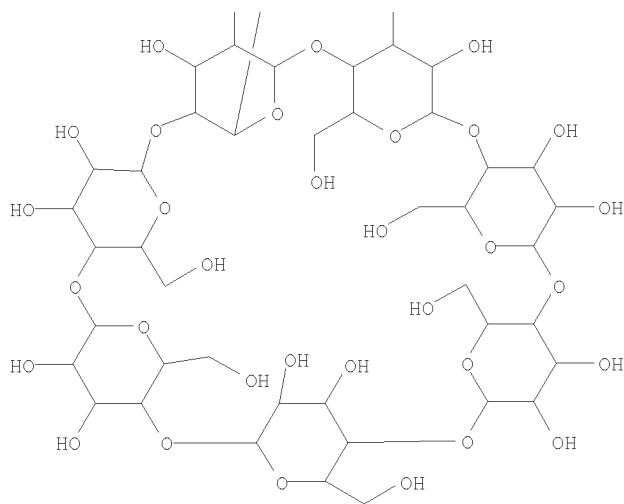
CM 2

CRN 530104-98-4  
CMF C144 H240 N36 O66 S Zn  
CCI CCS

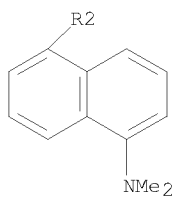
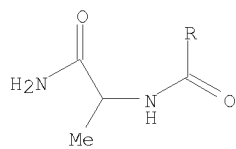
PAGE 1-A



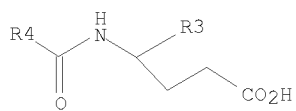
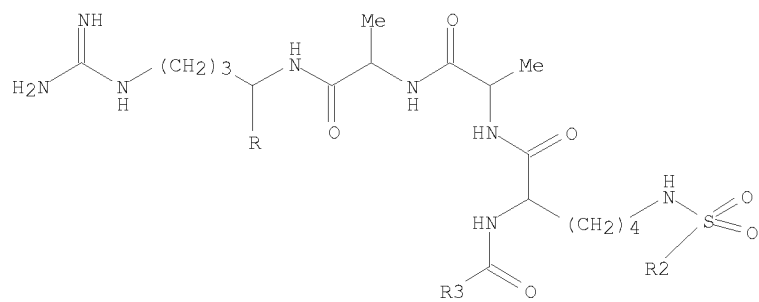
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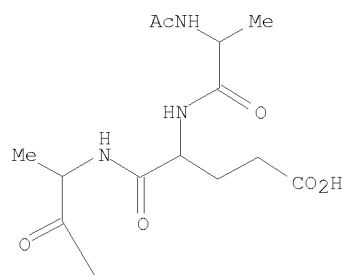
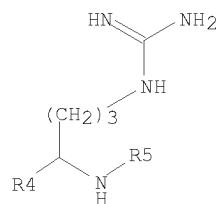
PAGE 3-A



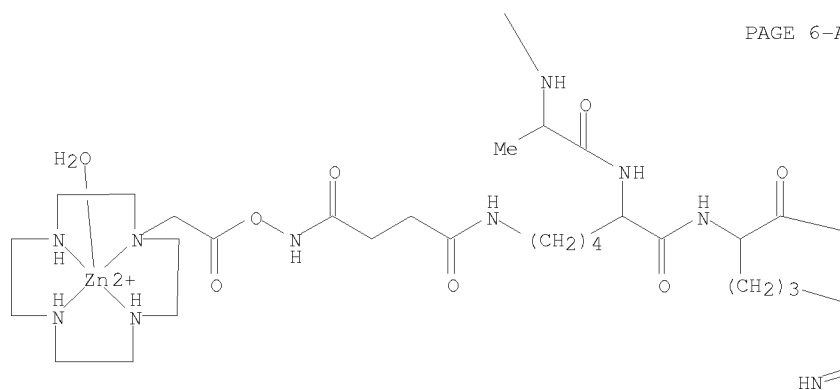
PAGE 4-A



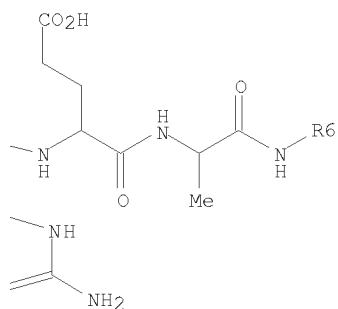
PAGE 5-A



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RN 530135-79-6 CAPLUS

CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-14)-, mono(tricyclo[3.3.1.3<sup>7</sup>]decane-1-carboxylate) (9CI) (CA INDEX NAME)

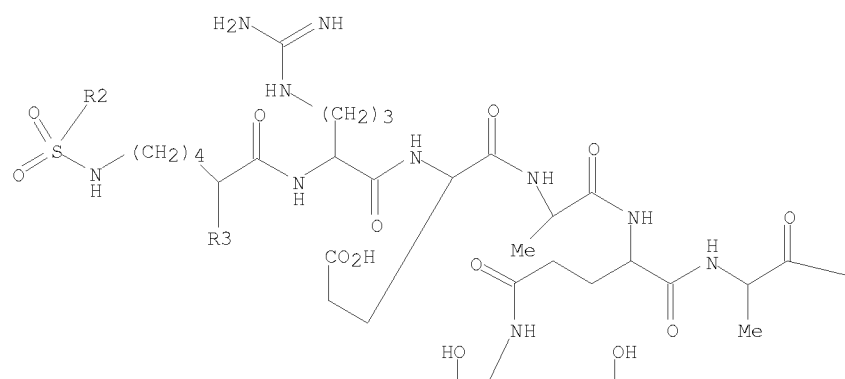
CM 1

CRN 530104-93-9

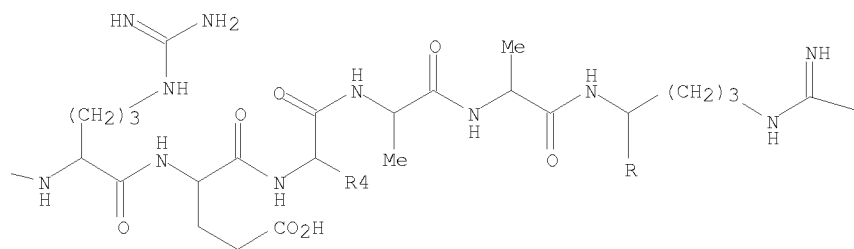
CMF C144 H240 N36 O66 S Zn

CCI CCS

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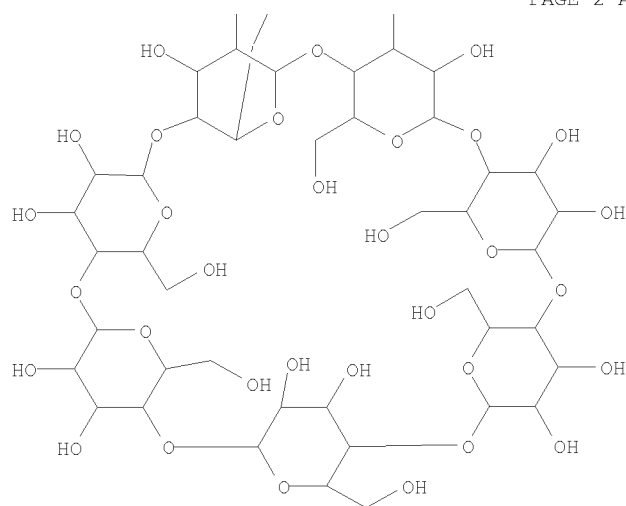
PAGE 1-B



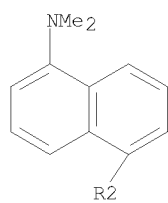
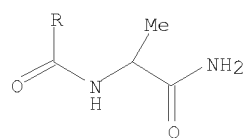
PAGE 1-C



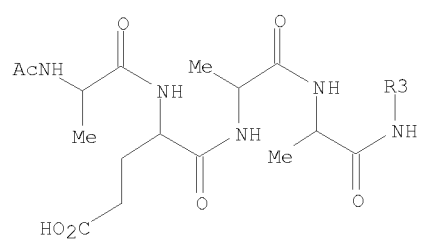
PAGE 2-A

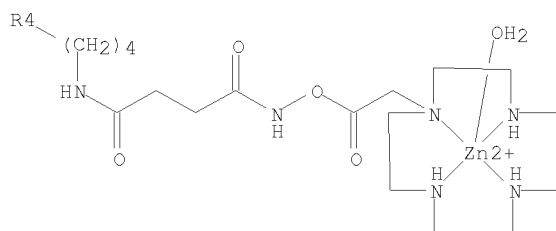


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PAGE 4-A

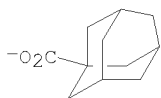




CM 2

CRN 65012-54-6

CMF C11 H15 O2



RN 530135-80-9 CAPLUS

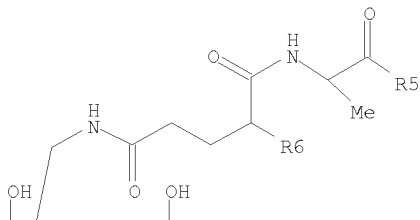
CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-14)-, mono(tricyclo[3.3.1.1.3,7]decane-1-carboxylate) (9CI) (CA INDEX NAME)

CM 1

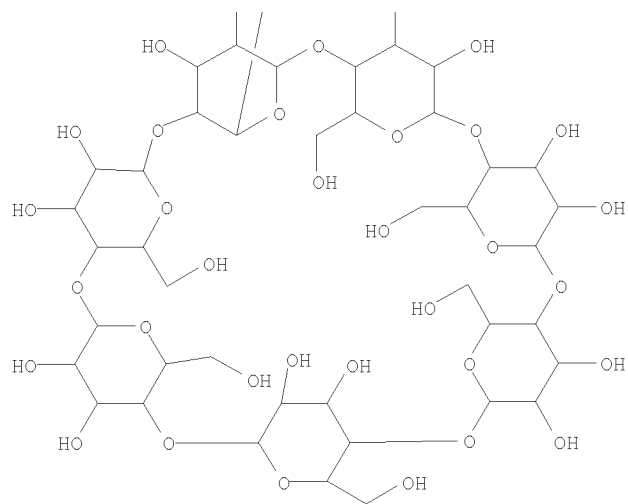
CRN 530104-98-4

CMF C144 H240 N36 O66 S Zn

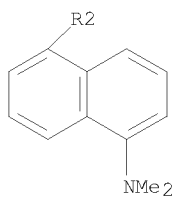
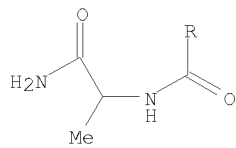
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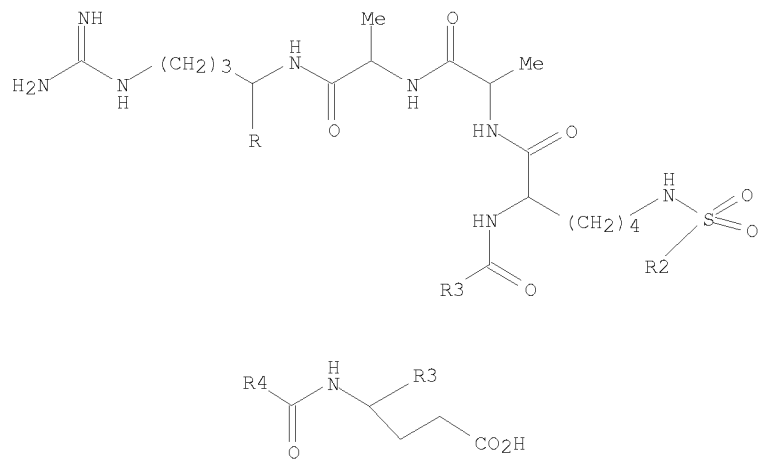
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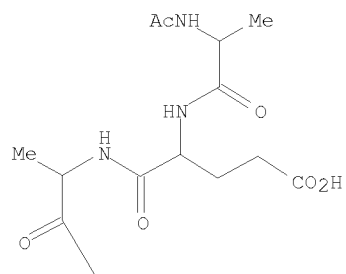
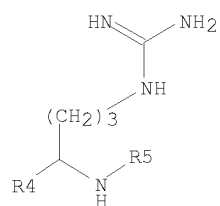
PAGE 3-A



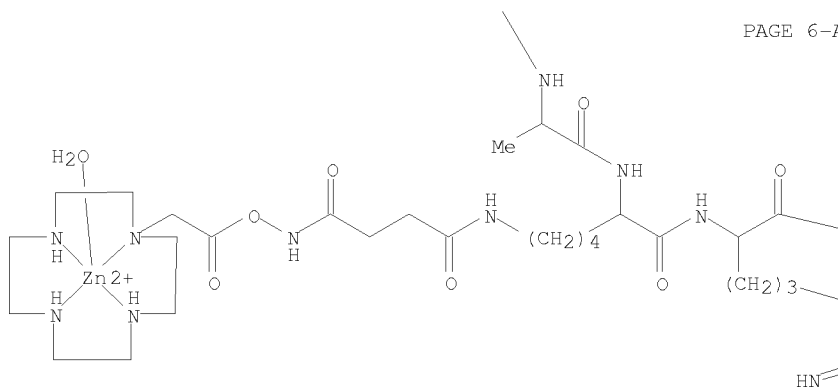
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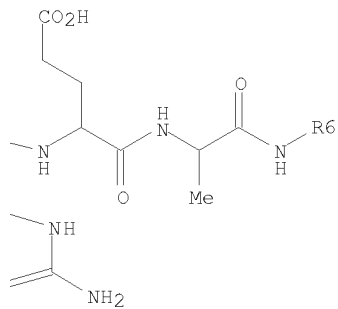
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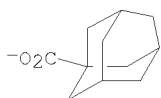


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CM 2

CRN 65012-54-6  
CMF C11 H15 O2



RN 530136-00-6 CAPLUS

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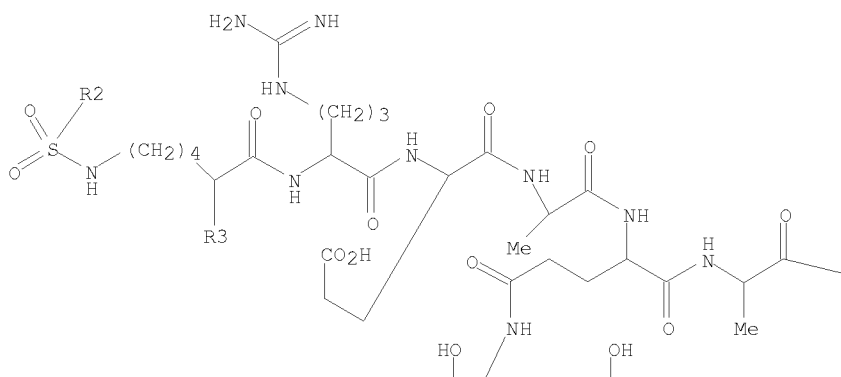
CM 1

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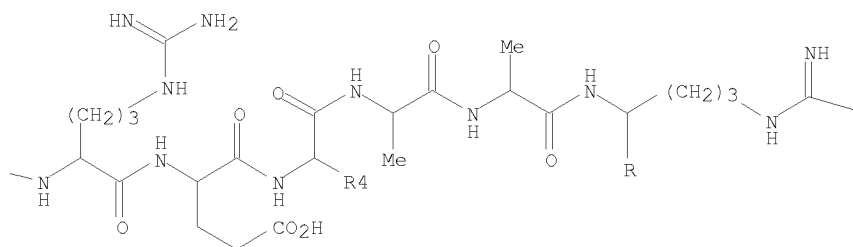
CMF C144 H240 N36 O66 S Zn

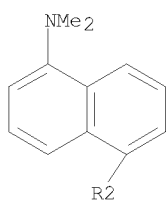
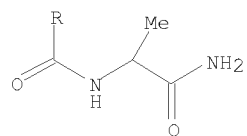
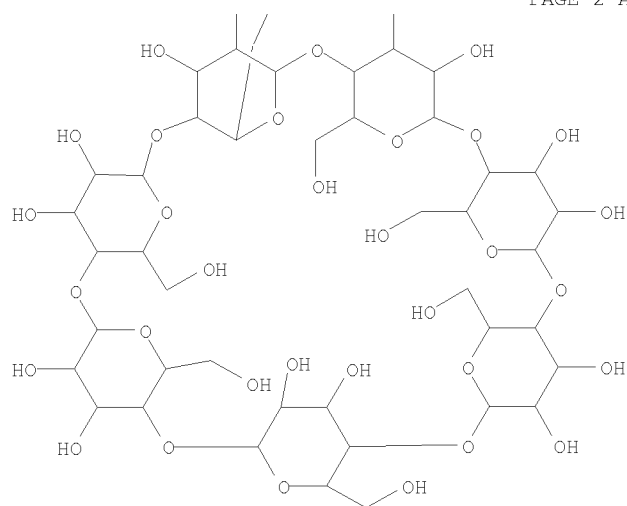
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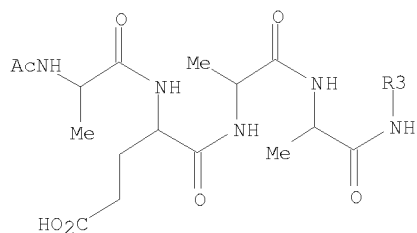


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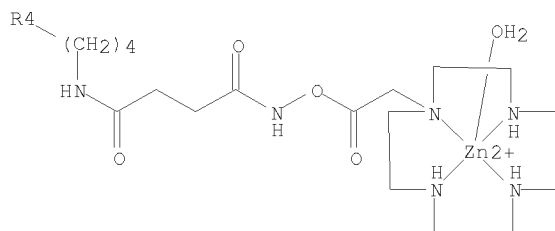




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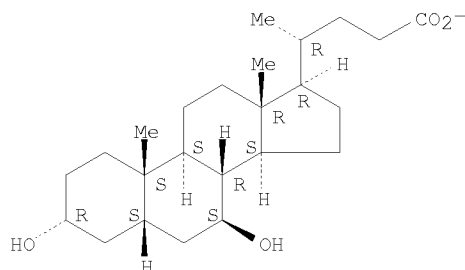


CM 2

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.



RN 530136-13-1 CAPLUS

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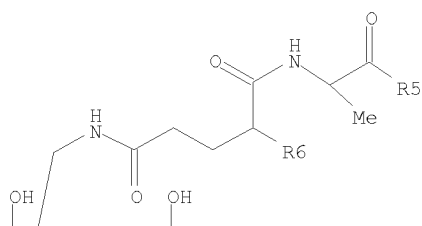
CM 1

CRN 530104-98-4

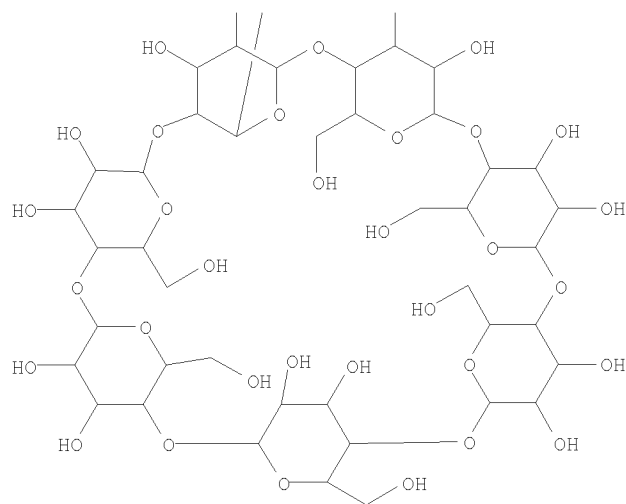
CMF C144 H240 N36 O66 S Zn

CCI CCS

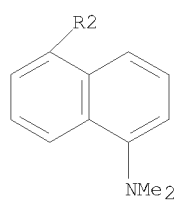
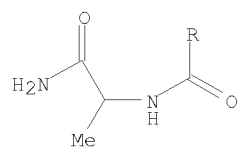
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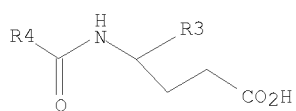
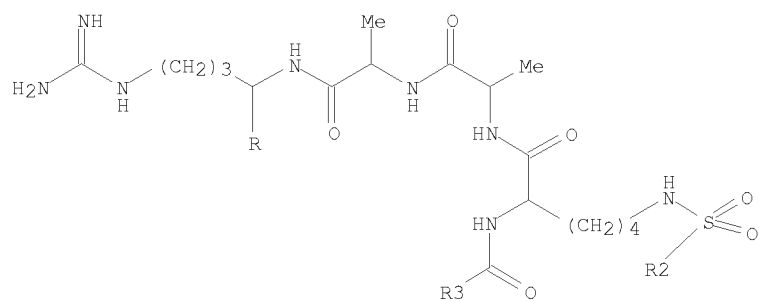
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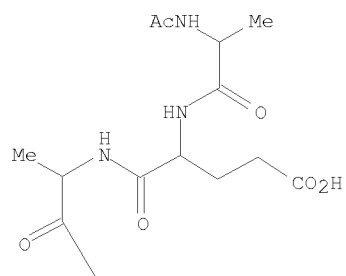
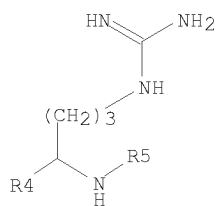
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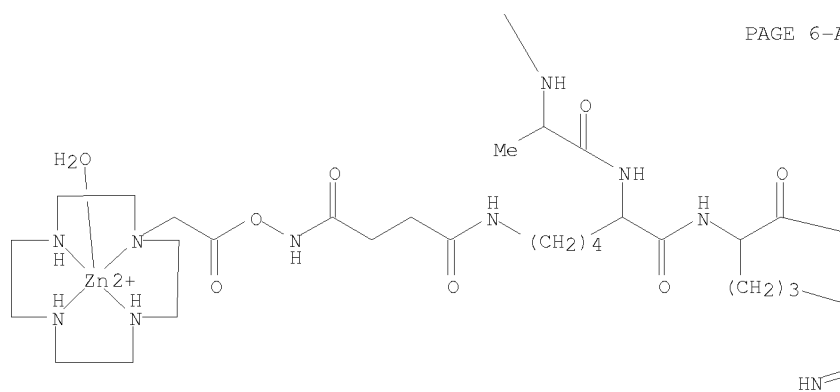
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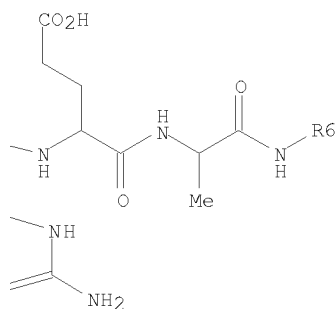
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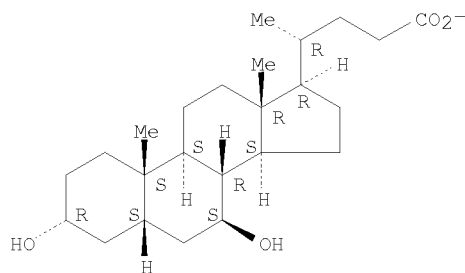


CM 2

CRN 14605-01-7

CMF C24 H39 O4

Absolute stereochemistry.

IT **530104-90-6 530104-95-1 530104-98-4**

RL: ARU (Analytical role, unclassified); DEV (Device component use); PRP (Properties); ANST (Analytical study); USES (Uses)

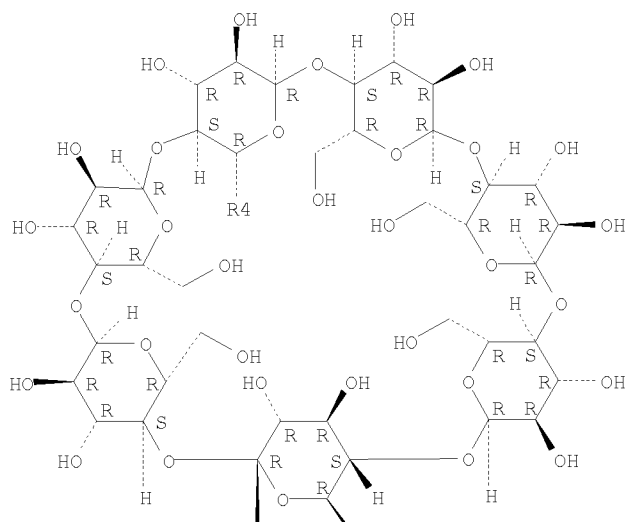
(sensing behavior of fluorescent **cyclodextrin**/peptide hybrids bearing a macrocyclic zinc complex and their applications for sensing organic anionic mols.)

RN 530104-90-6 CAPLUS

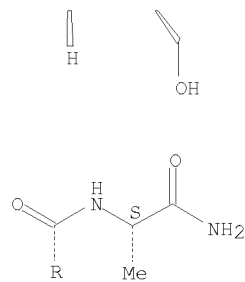
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[1,4,7,10-tetraazacyclododec-1-ylacetyl]oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

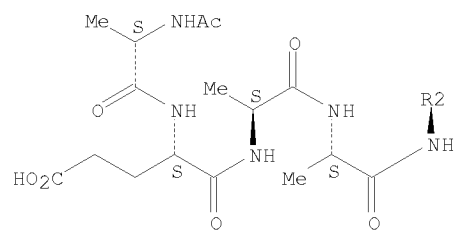
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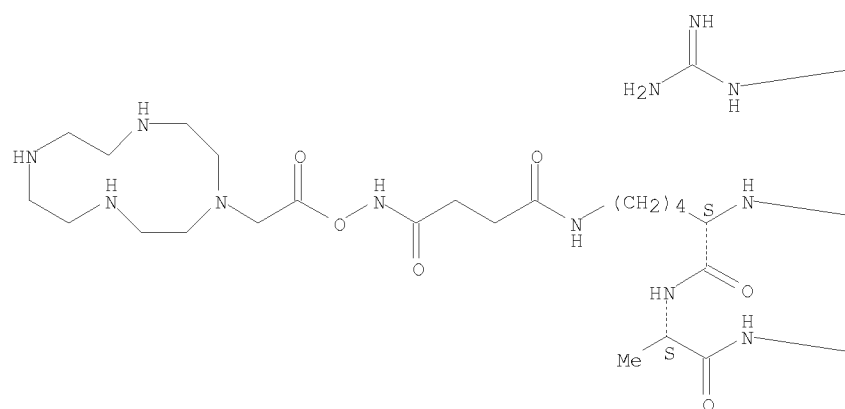
PAGE 2-A



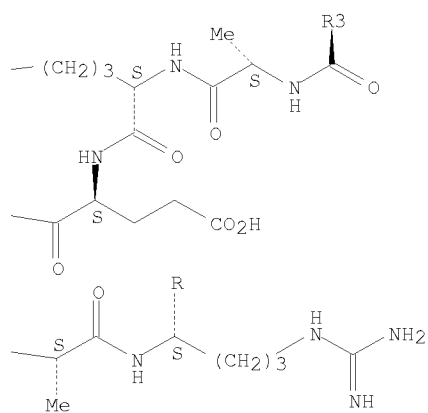
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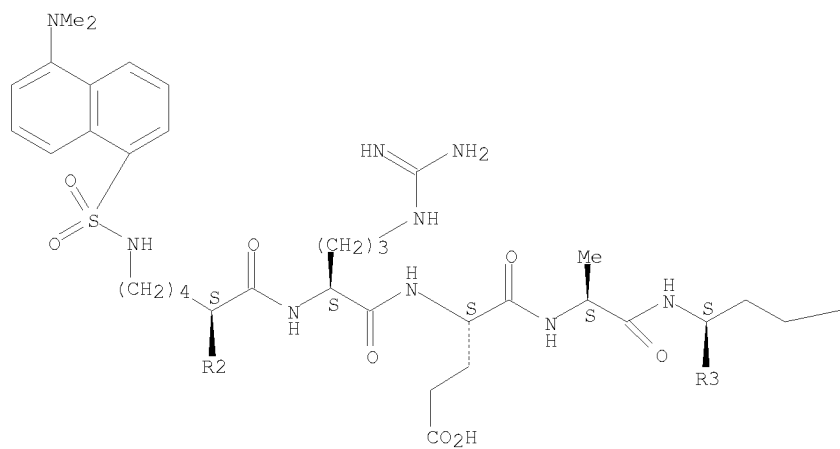
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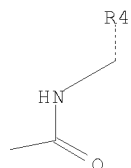


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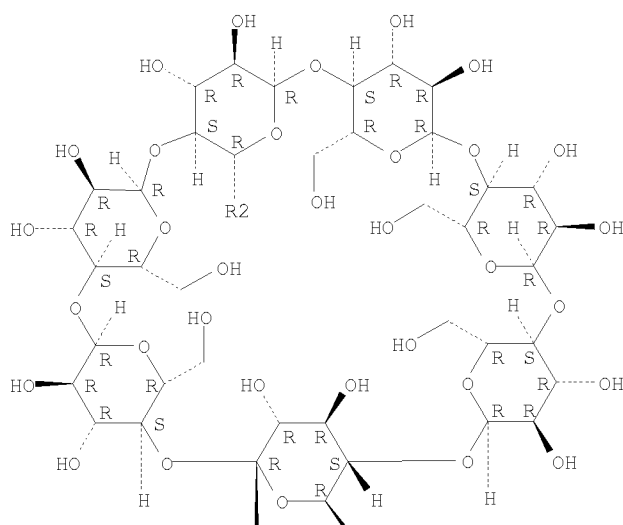




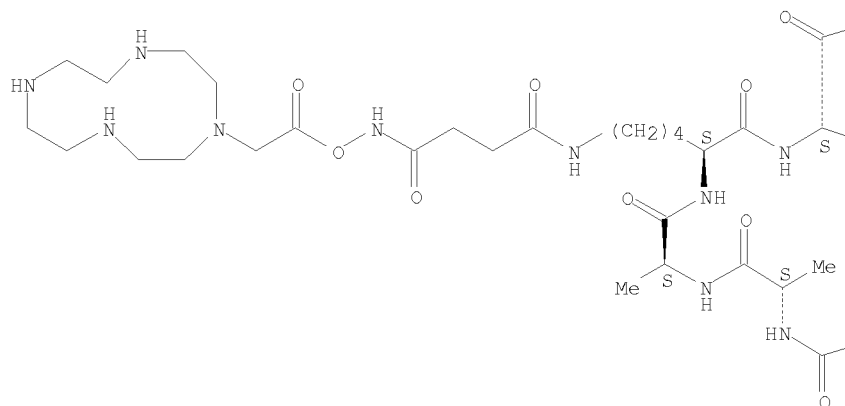
RN 530104-95-1 CAPLUS

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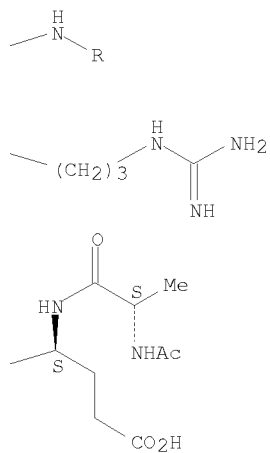
Absolute stereochemistry.



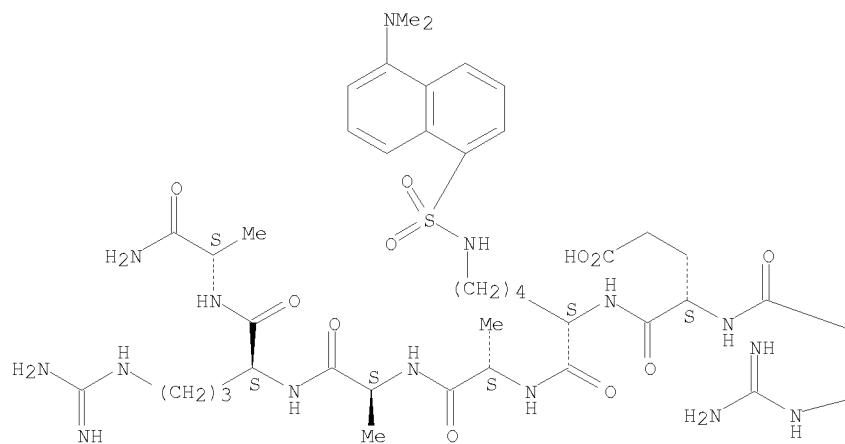
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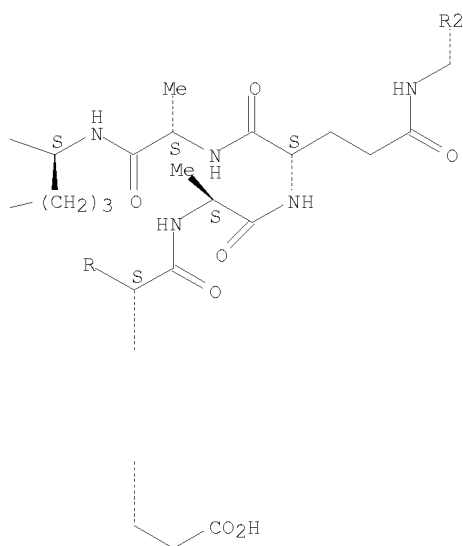


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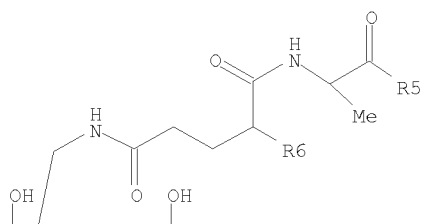


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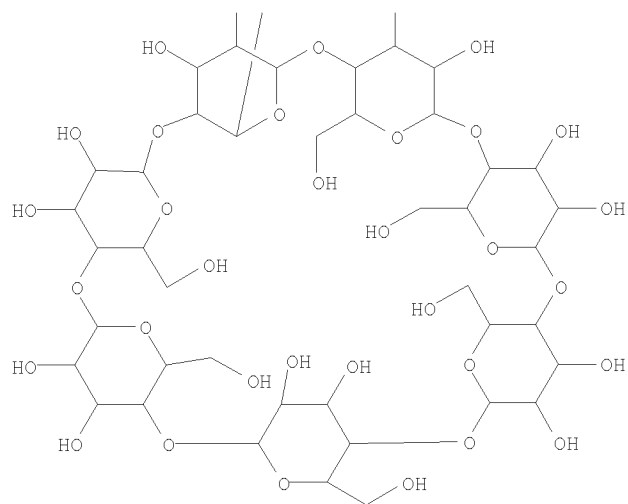




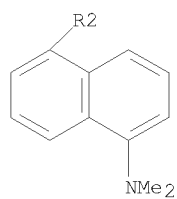
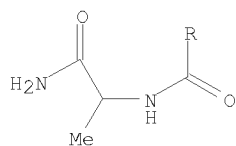
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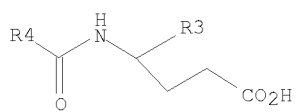
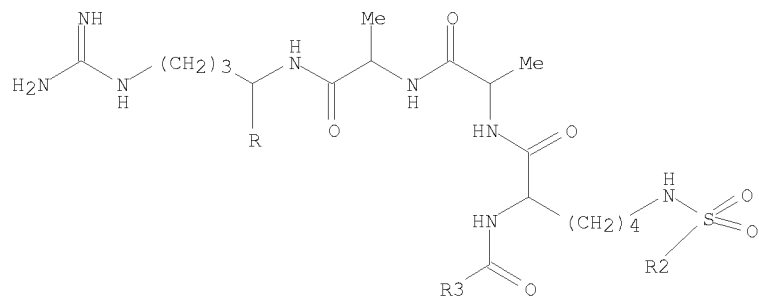
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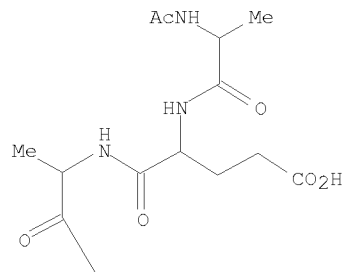
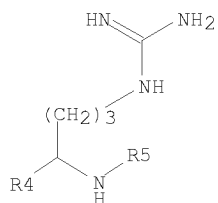
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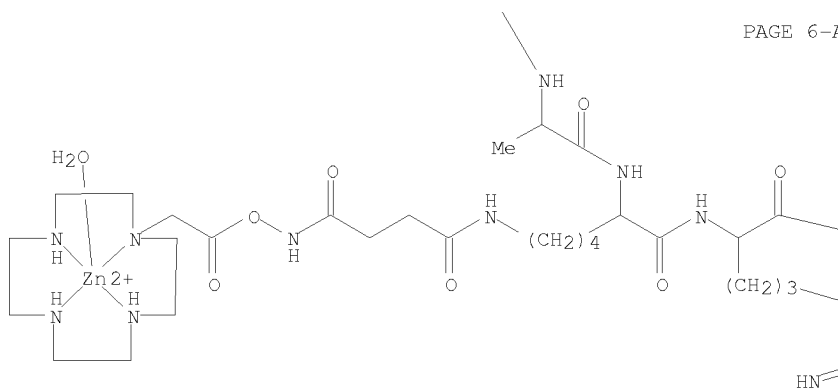
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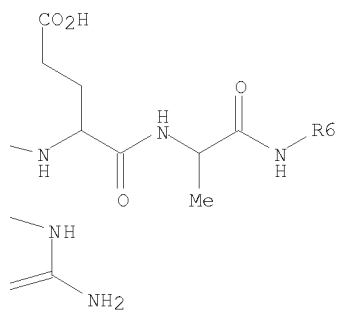
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IT **530104-93-9P**

RL: ARU (Analytical role, unclassified); DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

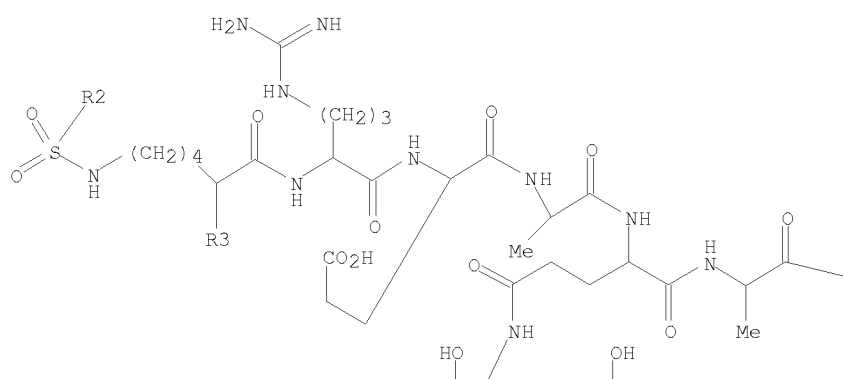
(sensing behavior of fluorescent cyclodextrin/peptide hybrids bearing a macrocyclic zinc complex and their applications for sensing

organic anionic mols.)

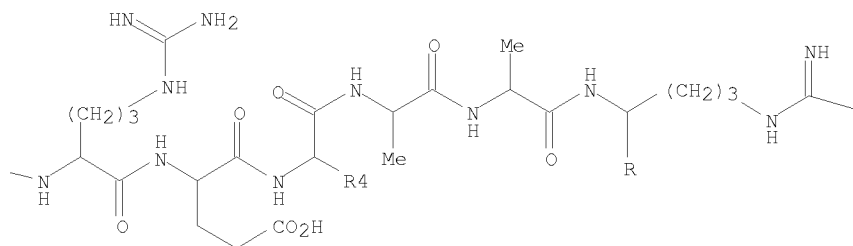
RN 530104-93-9 CAPLUS

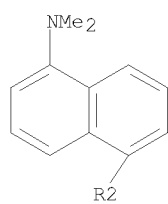
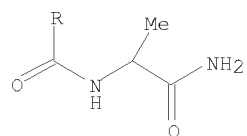
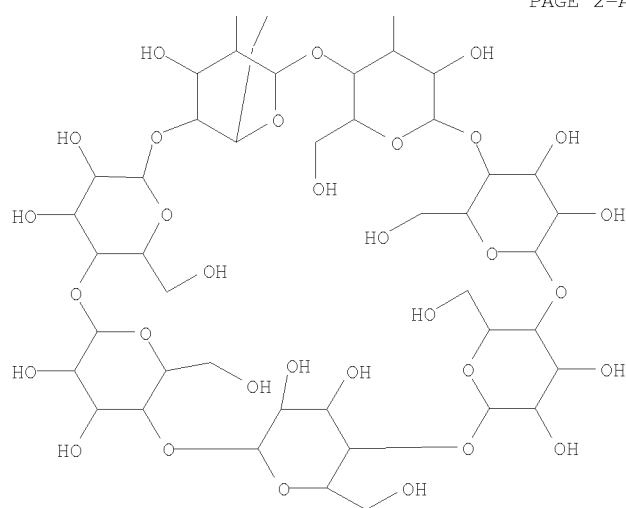
CN Zinc(2+), [N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-N6-[1,4-dioxo-4-[[[(1,4,7,10-tetraazacyclododec-1-yl- $\kappa$ N1, $\kappa$ N4, $\kappa$ N7, $\kappa$ N10)acetyl]oxy]amino]butyl]-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide]aqua-, (SP-5-14)- (9CI) (CA INDEX NAME)

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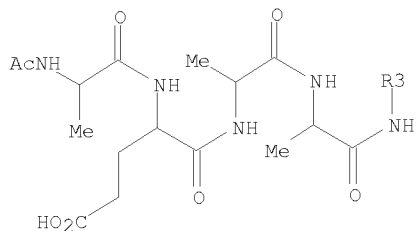


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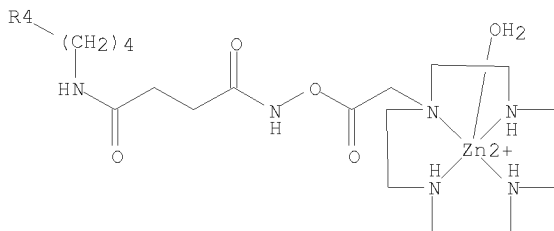




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REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:44746 CAPLUS

DOCUMENT NUMBER: 139:53274

TITLE: Molecule-Responsive Fluorescent Sensors of  $\alpha$ -Helix Peptides Bearing  $\alpha$ -Cyclodextrin, Pyrene and Nitrobenzene Units in Their Side Chains

AUTHOR(S): Hossain, Mohammed Akhter; Takahashi, Keiko; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Graduate School of Bioscience and Biotechnology, Department of Bioengineering, Tokyo Institute of Technology, Midori, Yokohama, 226-8501, Japan

SOURCE: Journal of Inclusion Phenomena and Macrocyclic Chemistry (2002), 43(3-4), 271-277  
CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:53274

AB  $\alpha$ -Helix peptides bearing one unit of  $\alpha$ -cyclodextrin ( $\alpha$ -CD), one unit of pyrene and one unit of nitrobenzene (NB) in their side chains have been designed and synthesized as novel mol.-responsive devices. In both CD-peptides,  $\alpha$ -PR17 and  $\alpha$ -PL17, the NB unit is separated from the CD unit by two turns of the helix. Two reference peptides (PL17, and PL17) have also been synthesized. The CD studies in the peptide absorption region (200-250 nm) of  $\alpha$ -PR17 and  $\alpha$ -PL17 suggest that the CD-peptides form stable  $\alpha$ -helix structures (83-77%), which was destabilized by accommodating guest mols. (e.g., n-pentanol) into the CD cavity. It suggests that formation of intramol. host-guest (CD-NB) complex stabilized the helical structure and exogenous guest mol. excluded the appending NB moiety from inside to outside of the CD cavity, thereby causing destabilization of the helical structure and increasing the random coil content. The ICD spectra of the peptides in the pyrene and nitrobenzene absorption region (250-40 nm) suggest that NB forms inclusion complex with CD. The fluorescence studies revealed that the fluorescence of the pyrene unit is quenched by the NB unit in  $\alpha$ -PR17 and  $\alpha$ -PL17. The fluorescence intensity increases with increasing guest concentration for the CD-peptides. This guest-responsive enhancement in the fluorescence intensity can be explained in terms of increased distance between the pyrene and NB moieties, which is caused by exclusion of the NB moiety from the CD cavity

by guest accommodation. Using the guest-responsive fluorescence quenching properties of the CD-peptides, we have obtained binding consts. for various short chain alkanols.  $\alpha$ -PL17 has higher binding affinity to the guest mols. than its isomer,  $\alpha$ -PR17, indicating that the location of functional groups on the peptide scaffold is important in mol. detection.

IT 543717-26-6 543717-28-8 543717-30-2  
543717-32-4 543717-34-6 543717-36-8  
543717-38-0 543717-40-4 543717-43-7  
543717-45-9

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
 (mol.-responsive fluorescent sensors of  $\alpha$ -helix peptides bearing  
 $\alpha$ - cyclodextrin, pyrene and nitrobenzene units in their  
 side chains)

RN 543717-26-6 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-  
 L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -  
 cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -  
 glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-  
 lysyl-, compd. with 1-butanol (1:1) (9CI) (CA INDEX NAME)

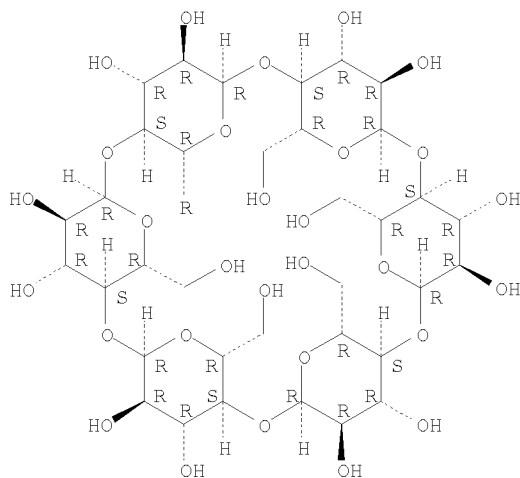
CM 1

CRN 543717-12-0

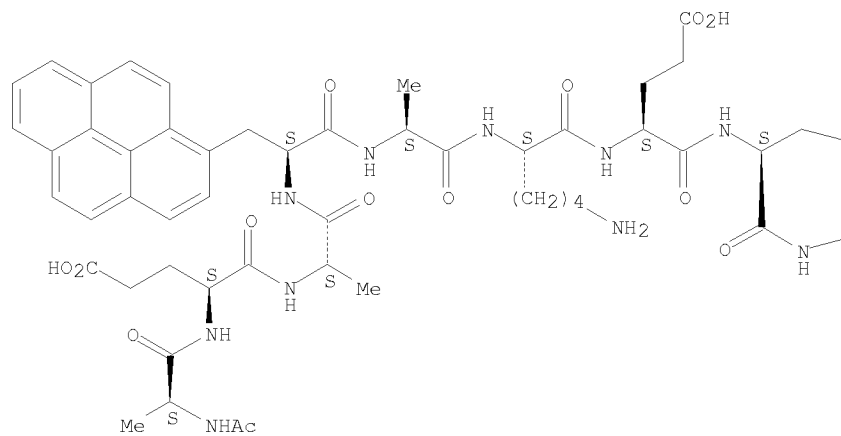
CMF C135 H202 N24 O57

Absolute stereochemistry.

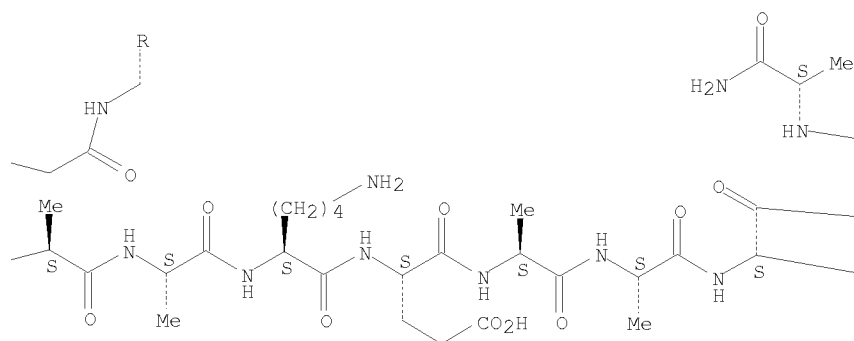
PAGE 1-A



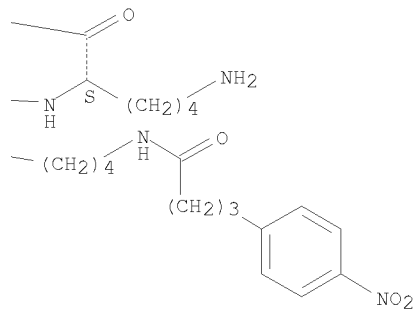
PAGE 2-A



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PAGE 2-C



CM 2

CRN 71-36-3

CMF C4 H10 O



RN 543717-28-8 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 1-butanol (1:1) (9CI) (CA INDEX NAME)

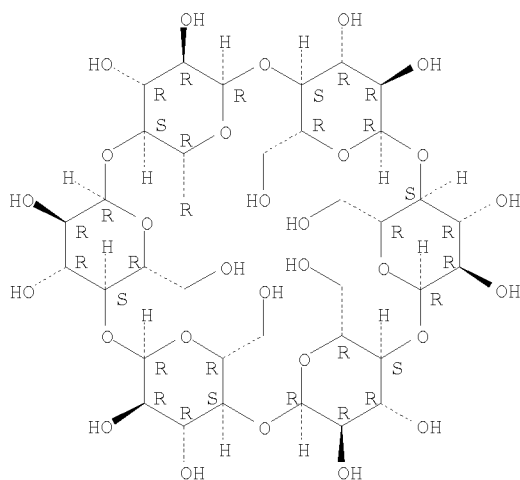
CM 1

CRN 543717-14-2

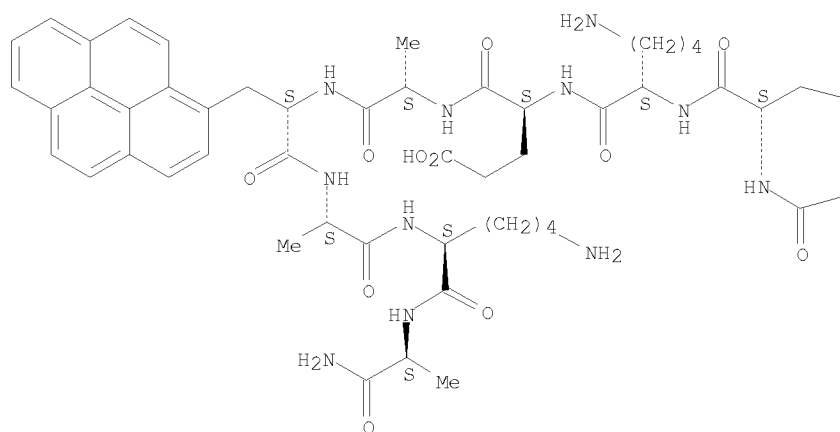
CMF C135 H202 N24 O57

Absolute stereochemistry.

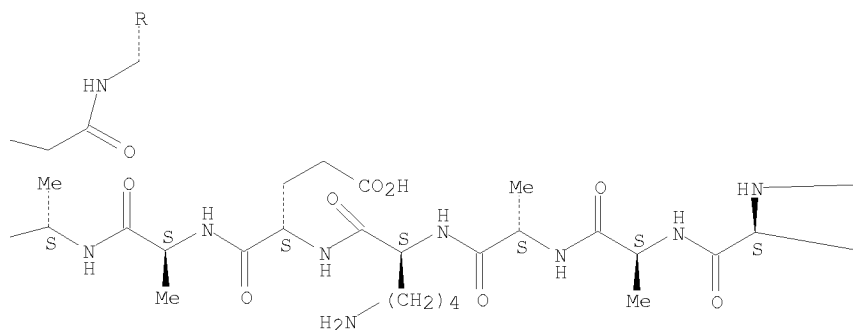
PAGE 1-A



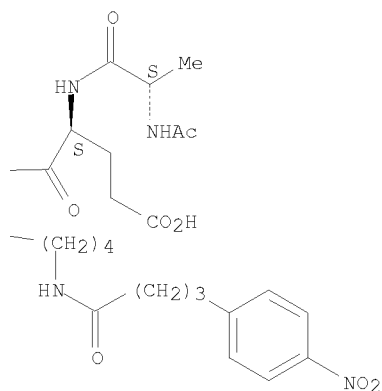
PAGE 2-A



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CM 2

CRN 71-36-3

CMF C4 H10 O



RN 543717-30-2 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-lysyl-, compd. with 2-methyl-1-propanol (1:1) (9CI) (CA INDEX NAME)

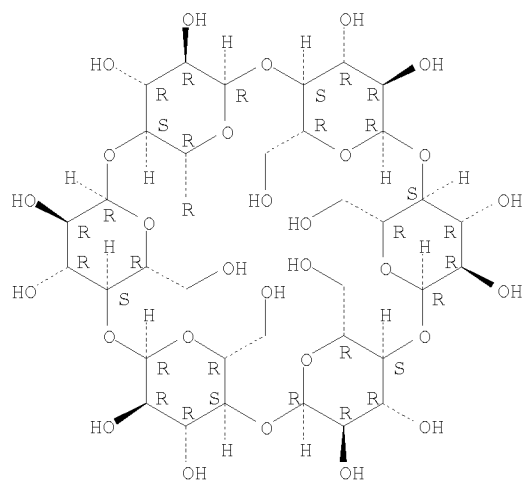
CM 1

CRN 543717-12-0

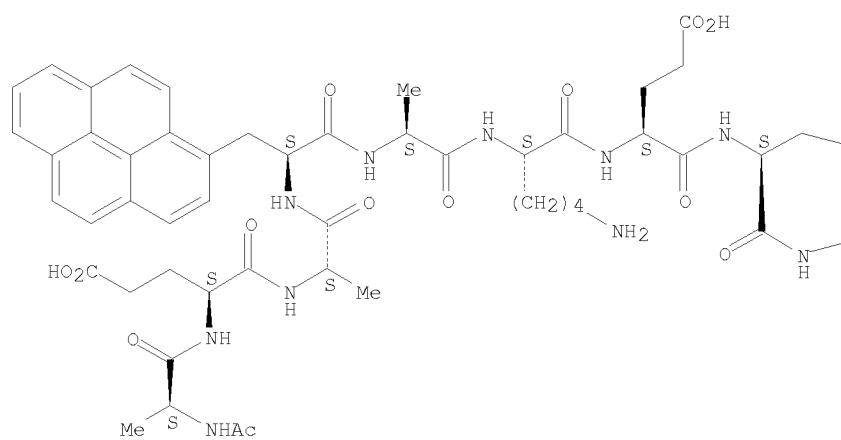
CMF C135 H202 N24 O57

Absolute stereochemistry.

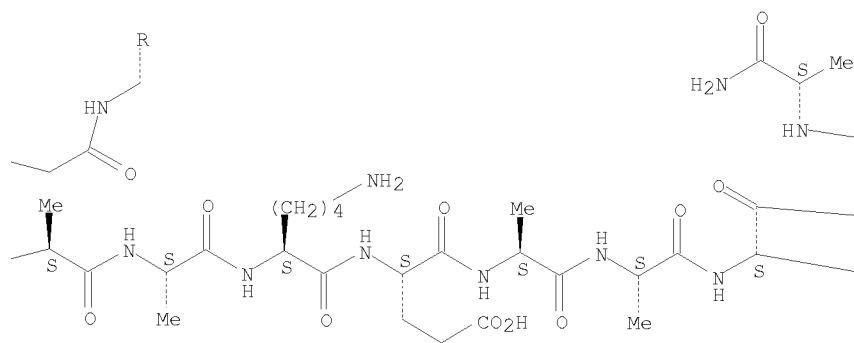
PAGE 1-A

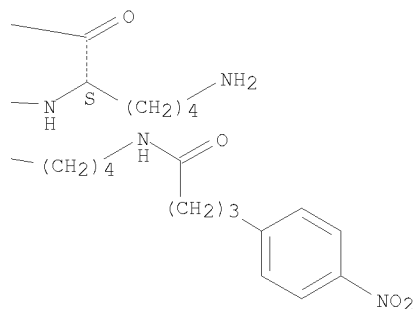


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PAGE 2-B

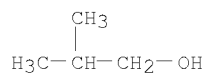




CM 2

CRN 78-83-1

CMF C4 H10 O



RN 543717-32-4 CAPLUS

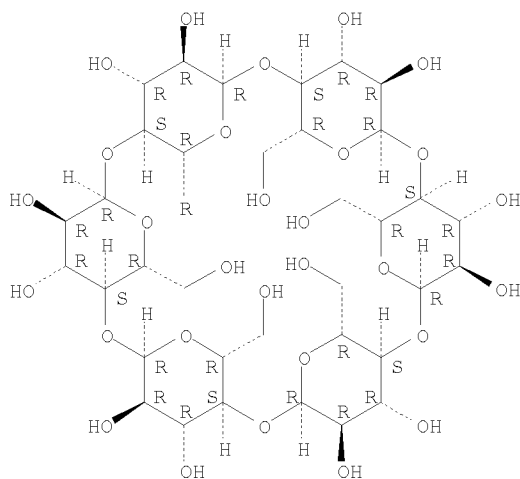
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 2-methyl-1-propanol (1:1) (9CI) (CA INDEX NAME)

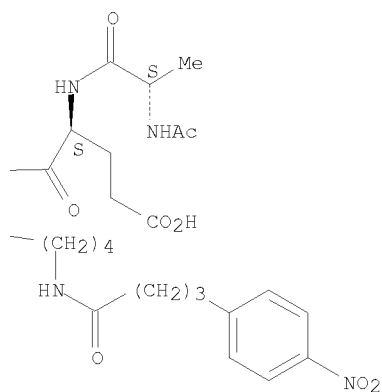
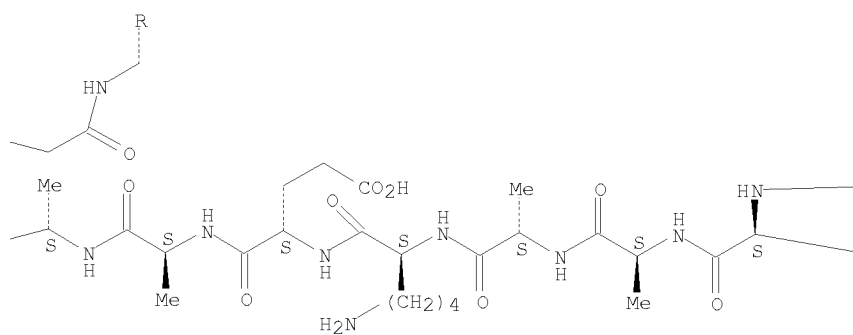
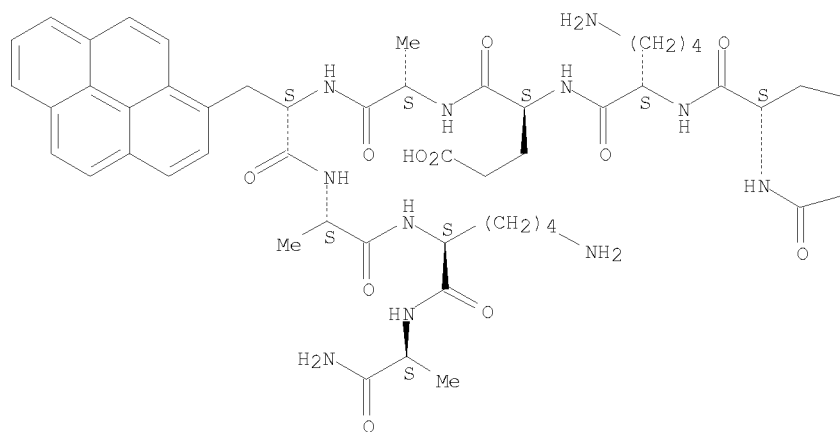
CM 1

CRN 543717-14-2

CMF C135 H202 N24 O57

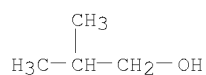
Absolute stereochemistry.





CM 2

CRN 78-83-1  
 CMF C4 H10 O



RN 543717-34-6 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-lysyl-, compd. with 1-pentanol (1:1) (9CI) (CA INDEX NAME)

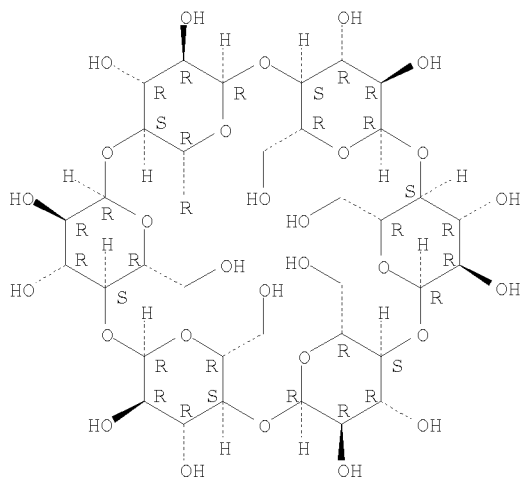
CM 1

CRN 543717-12-0

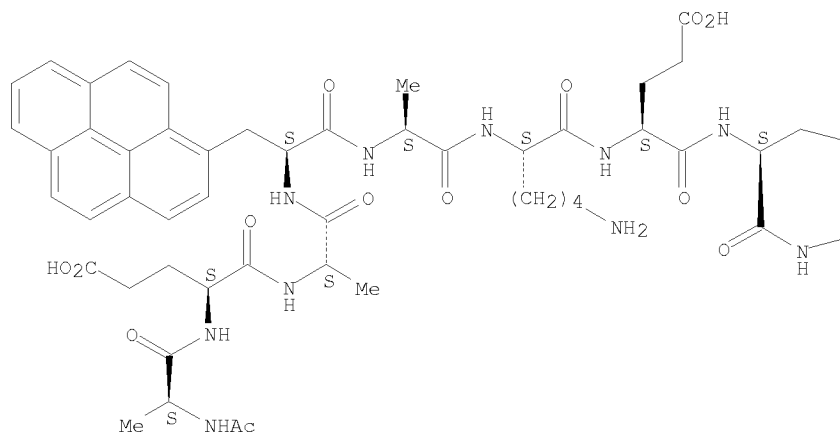
CMF C135 H202 N24 O57

Absolute stereochemistry.

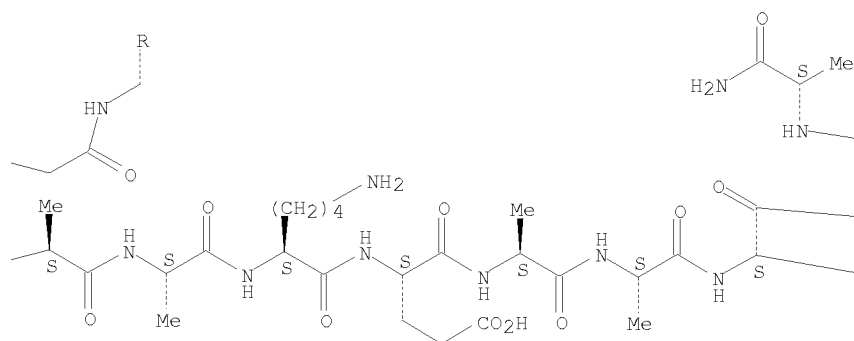
PAGE 1-A



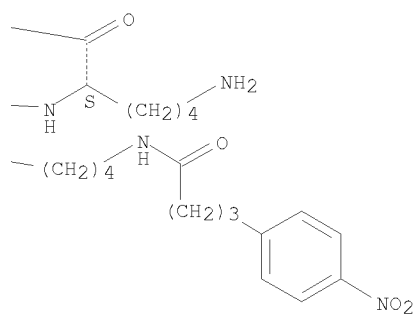
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CM 2

CRN 71-41-0

CMF C5 H12 O

Me-(CH<sub>2</sub>)<sub>4</sub>-OH

RN 543717-36-8 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 1-pentanol (1:1) (9CI) (CA INDEX NAME)

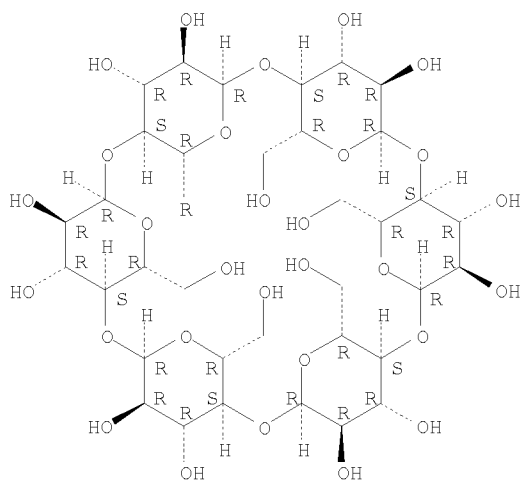
CM 1

CRN 543717-14-2

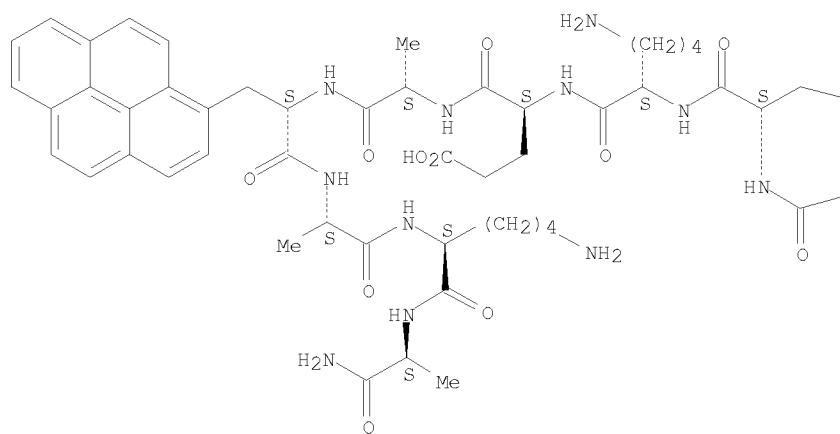
CMF C135 H202 N24 O57

Absolute stereochemistry.

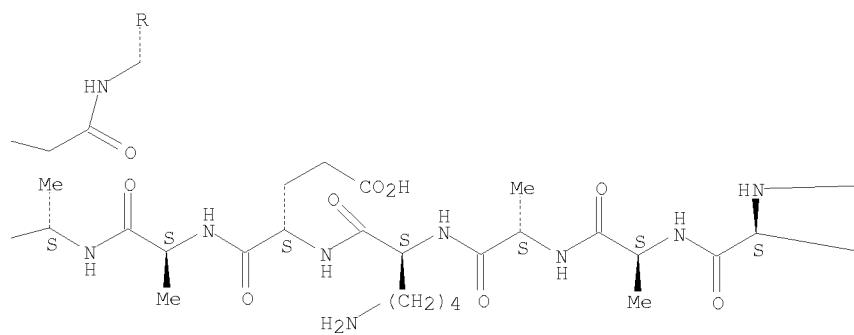
PAGE 1-A

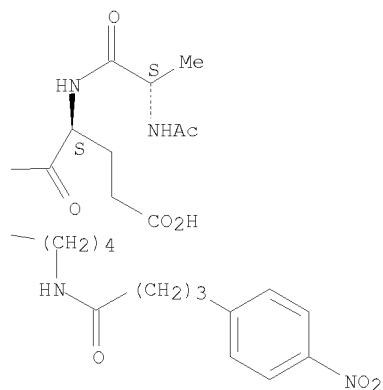


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CM 2

CRN 71-41-0

CMF C5 H12 O

Me-(CH<sub>2</sub>)<sub>4</sub>-OH

RN 543717-38-0 CAPLUS

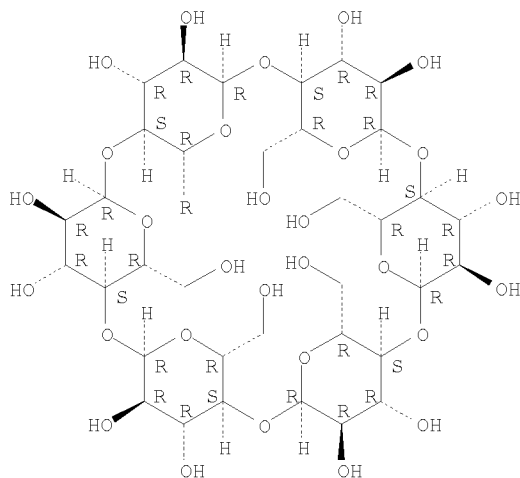
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-  
 L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -  
 cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -  
 glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-  
 lysyl-, compd. with 3-methyl-1-butanol (1:1) (9CI) (CA INDEX NAME)

CM 1

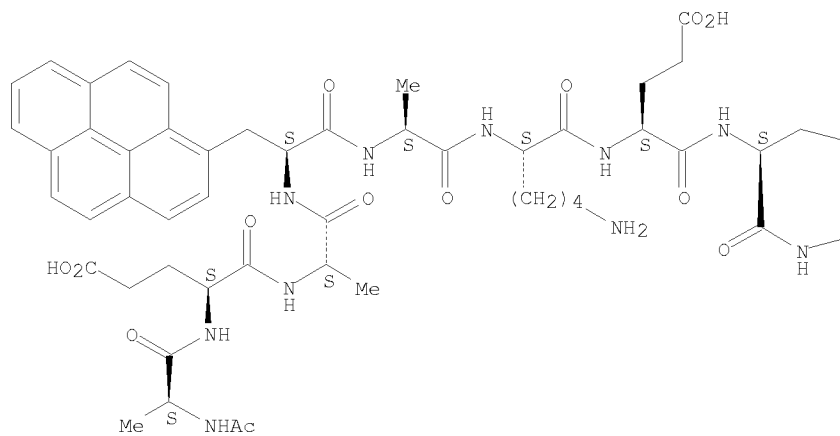
CRN 543717-12-0

CMF C135 H202 N24 O57

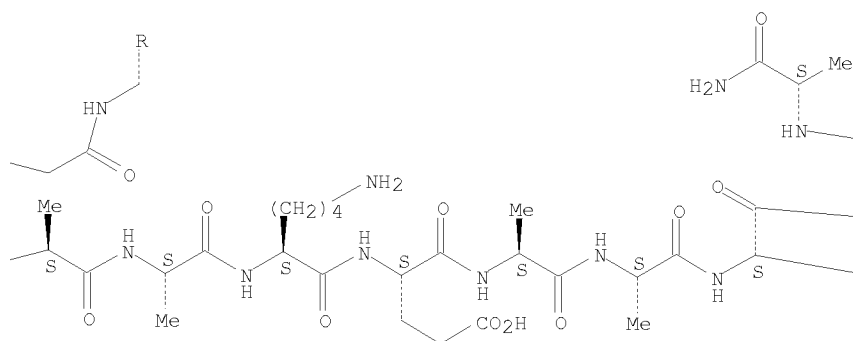
Absolute stereochemistry.



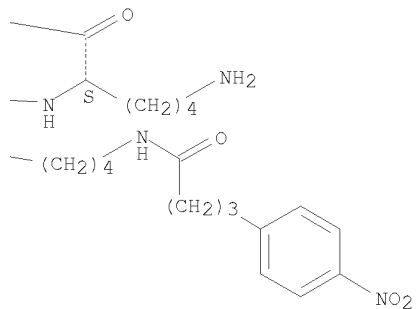
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CM 2

CRN 123-51-3  
CMF C5 H12 O

Me<sub>2</sub>CH-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 543717-40-4 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 3-methyl-1-butanol (1:1) (9CI) (CA INDEX NAME)

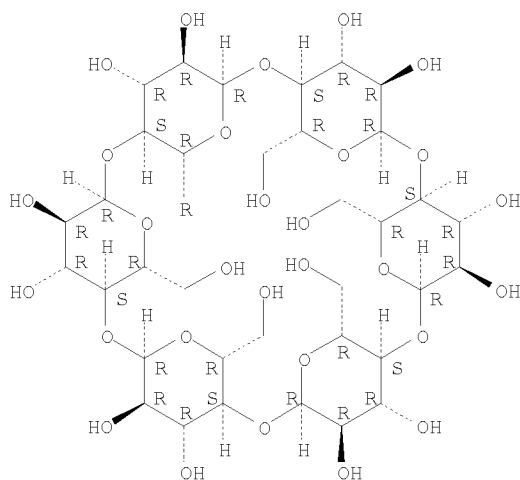
CM 1

CRN 543717-14-2

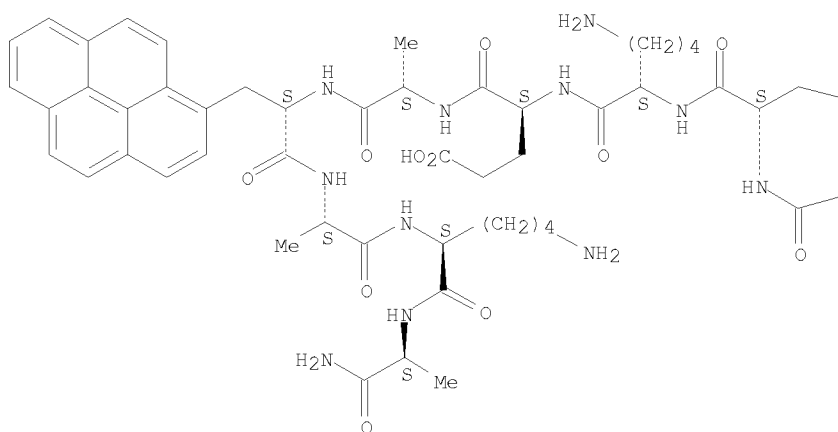
CMF C135 H202 N24 O57

Absolute stereochemistry.

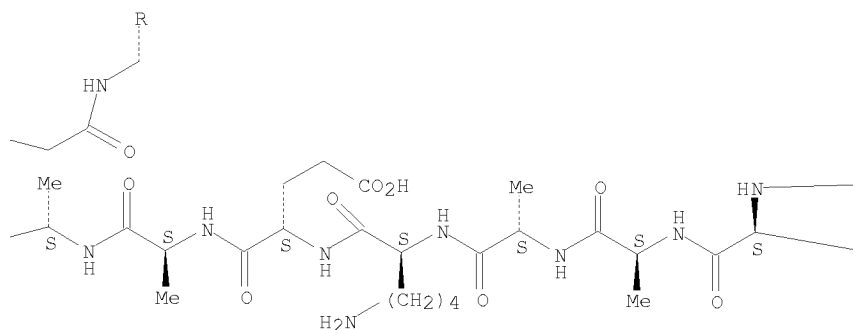
PAGE 1-A



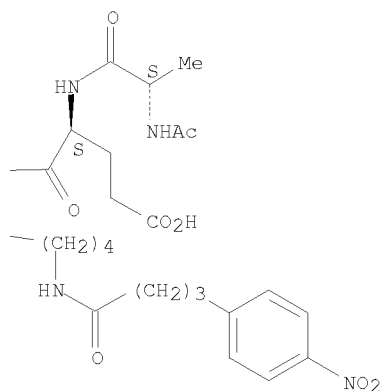
PAGE 2-A



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CM 2

CRN 123-51-3

CMF C5 H12 O

Me<sub>2</sub>CH-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 543717-43-7 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-  
L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -  
cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -  
glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-  
lysyl-, compd. with 1-hexanol (1:1) (9CI) (CA INDEX NAME)

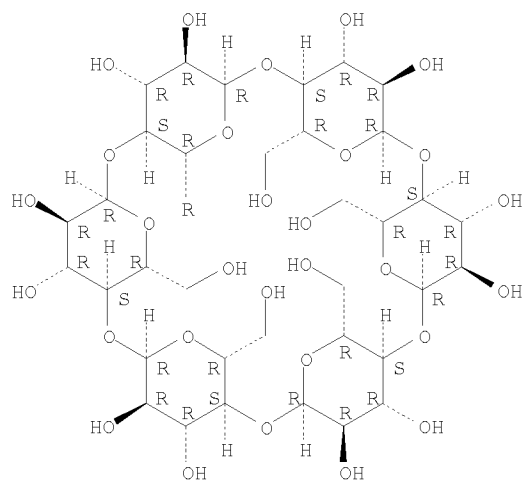
CM 1

CRN 543717-12-0

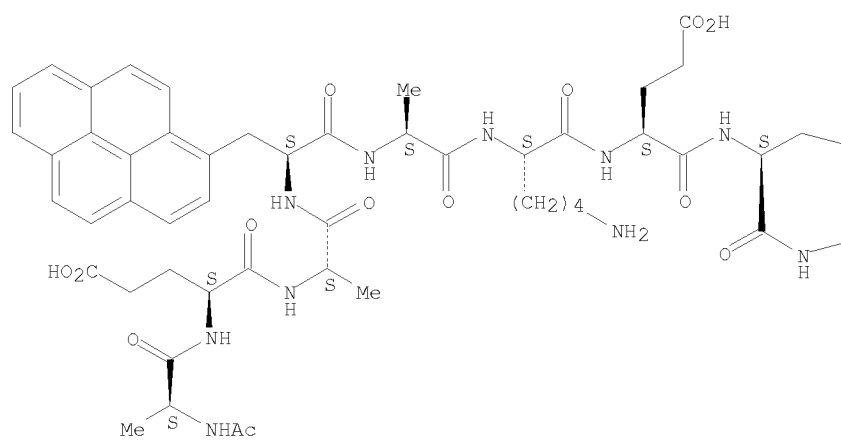
CMF C135 H202 N24 O57

Absolute stereochemistry.

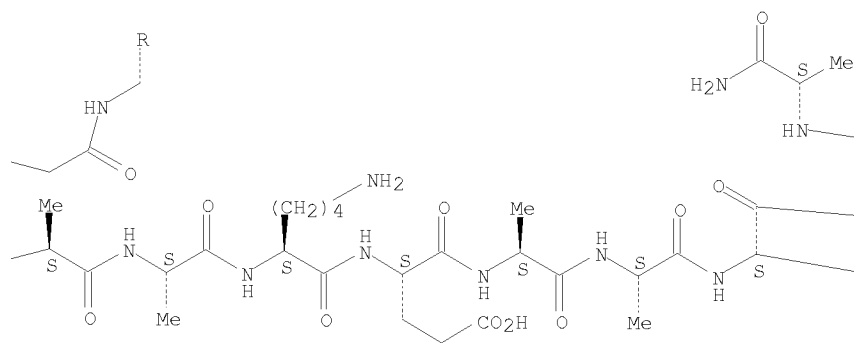
PAGE 1-A

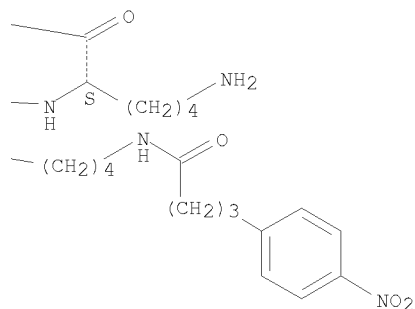


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CM 2

CRN 111-27-3

CMF C6 H14 O

HO-(CH<sub>2</sub>)<sub>5</sub>-Me

RN 543717-45-9 CAPLUS

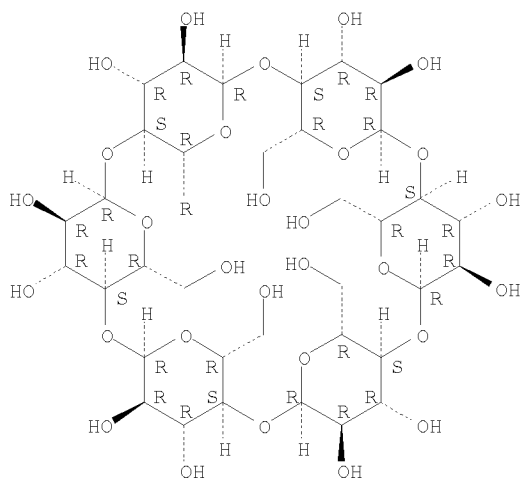
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-, compd. with 1-hexanol (1:1) (9CI) (CA INDEX NAME)

CM 1

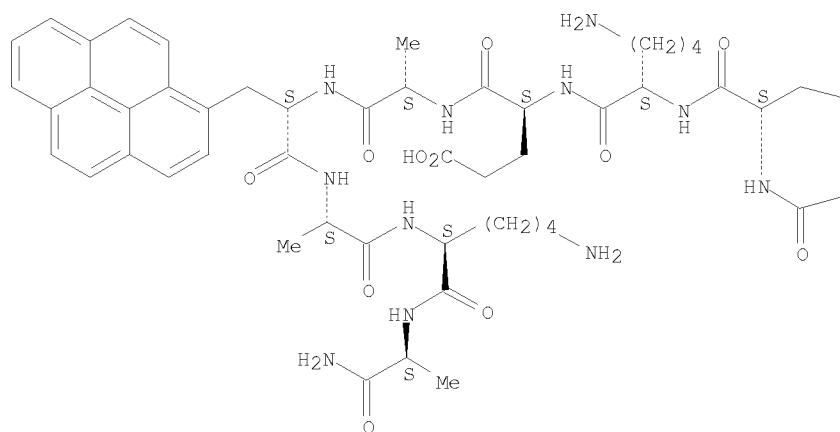
CRN 543717-14-2

CMF C135 H202 N24 O57

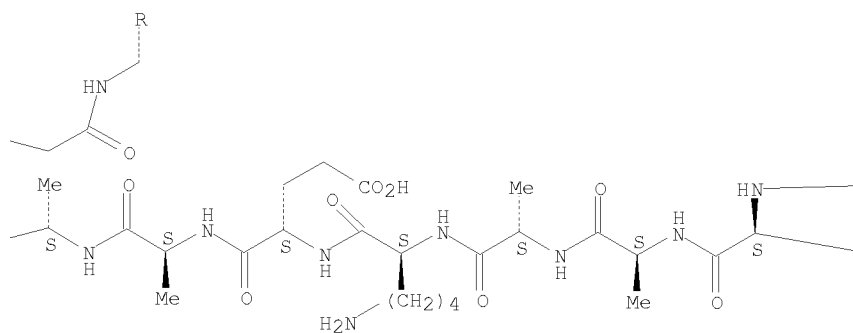
Absolute stereochemistry.



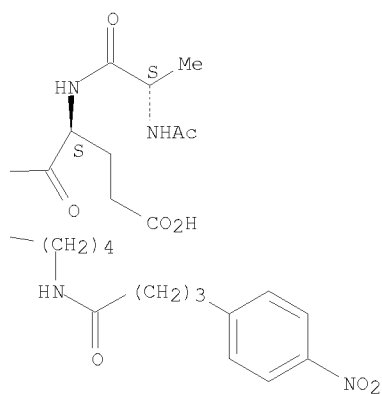
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CM 2

CRN 111-27-3

CMF C6 H14 O

HO—(CH<sub>2</sub>)<sub>5</sub>—Me

IT **543717-12-0P 543717-14-2P**

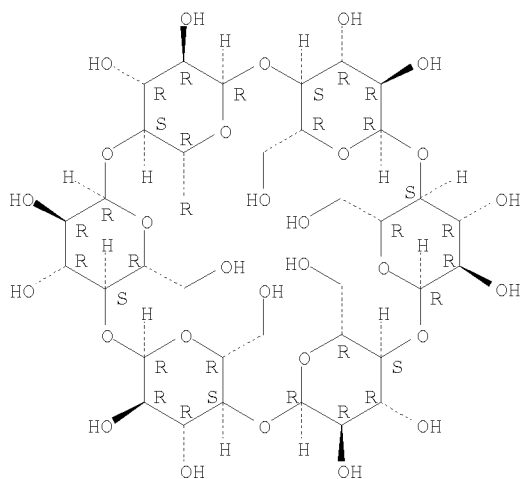
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(mol.-responsive fluorescent sensors of  $\alpha$ -helix peptides bearing  
 $\alpha$ - **cyclodextrin**, pyrene and nitrobenzene units in their  
side chains)

RN 543717-12-0 CAPLUS

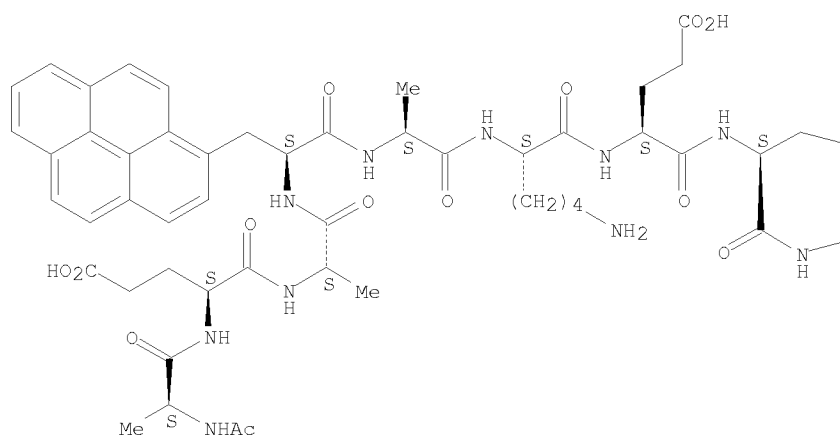
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-  
L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\alpha$ -  
cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -  
glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-  
lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

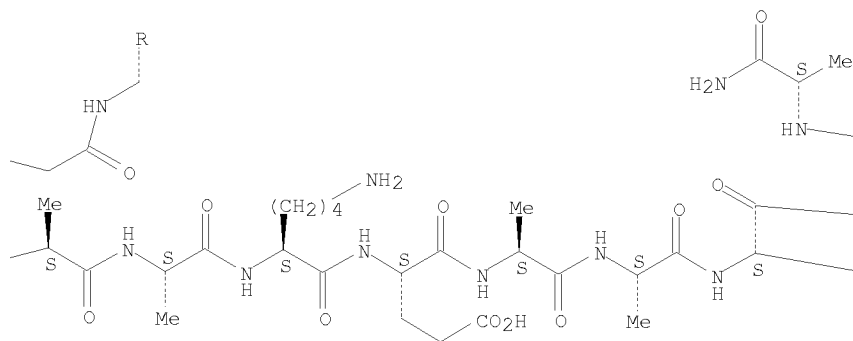
PAGE 1-A



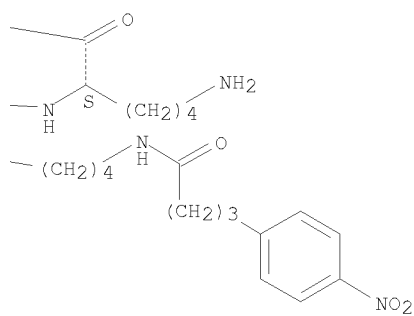
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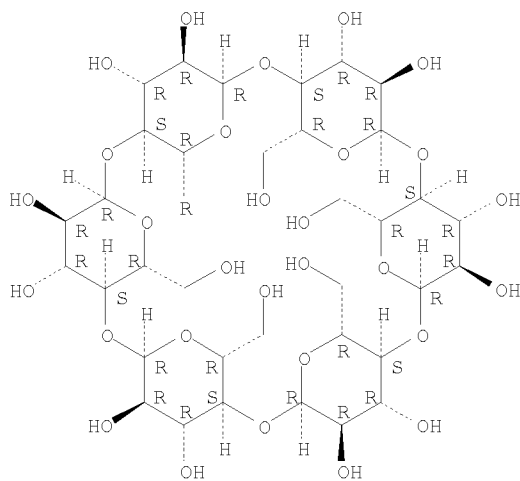
PAGE 2-C



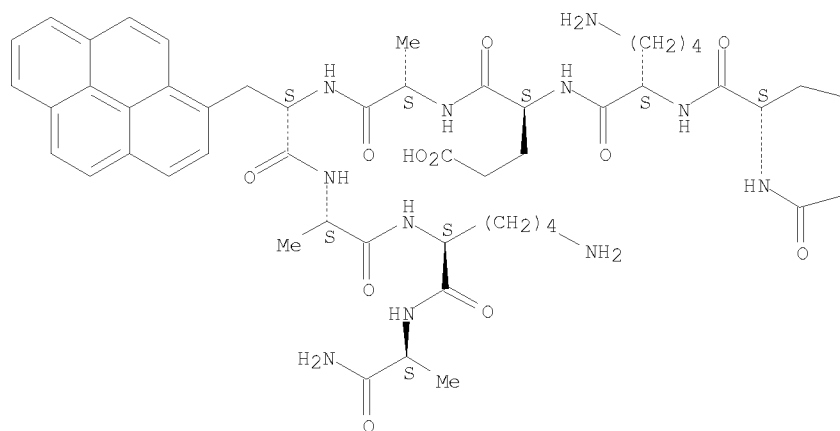
RN 543717-14-2 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\alpha$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

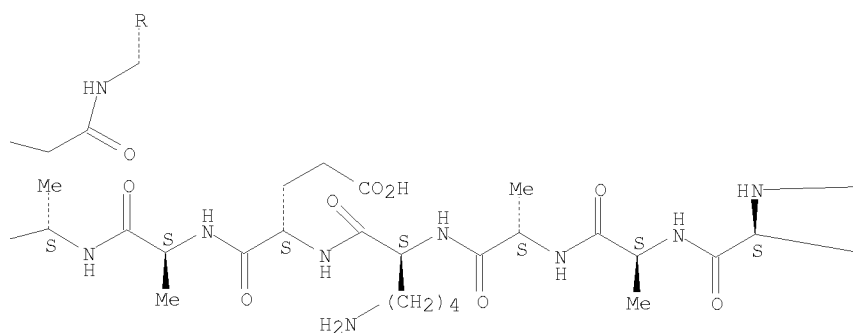
PAGE 1-A



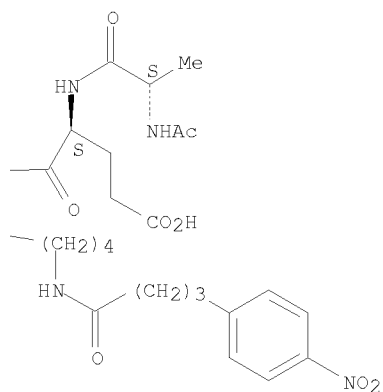
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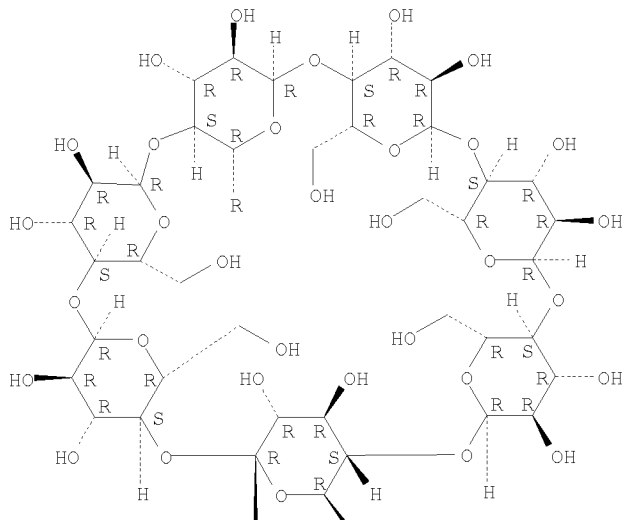
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:947909 CAPLUS  
 DOCUMENT NUMBER: 138:401995

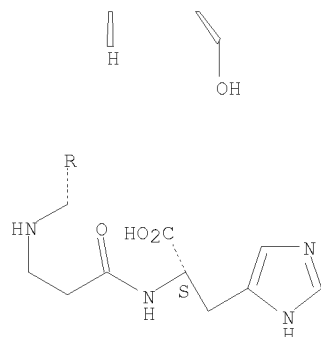
TITLE: Copper(II) assisted self-assembly of functionalized  $\beta$ -**cyclodextrins** with  $\beta$ -alanyl-L-histidine  
 AUTHOR(S): La Mendola, Diego; Mineo, Placido; Rizzarelli, Enrico; Scamporrino, Emilio; Vecchio, Graziella; Vitalini, Daniele  
 CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, 95125, Italy  
 SOURCE: Journal of Supramolecular Chemistry (2002), Volume Date 2001, 1(3), 147-151  
 CODEN: JSCOC9; ISSN: 1472-7862  
 PUBLISHER: Pergamon Press  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A combined UV-visible, CD and ESI-MS spectroscopic approach has been followed to obtain the speciation and the bonding details of copper(II) complexes with  $\beta$ -**cyclodextrins** functionalized by means of the bio-active peptide  $\beta$ -alanyl-L-histidine (carnosine). A new metal-assisted self-assembled system of bifunctionalized  $\beta$ -**cyclodextrins** has been shown to exist.  
 IT **393100-96-4P 527698-29-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (supramol. assembly of functionalized  $\beta$ -alanyl-L-histidine linked  $\beta$ -**cyclodextrins** with copper (II) inclusion complexes)  
 RN 393100-96-4 CAPLUS  
 CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

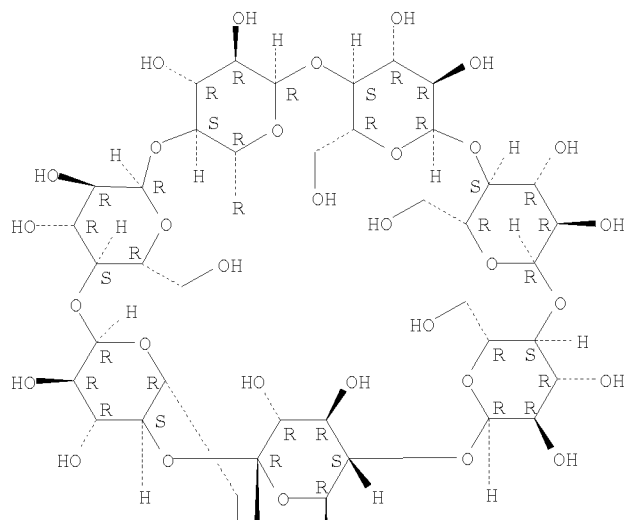


RN 527698-29-9 CAPLUS

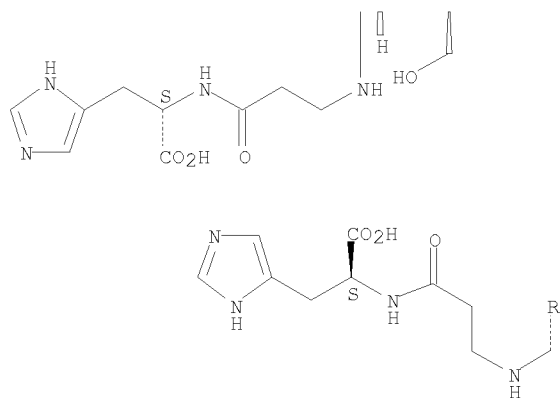
CN L-Histidine, 1,1'-(6A,6C-dideoxy- $\beta$ -cyclodextrin-6A,6C-diyl)bis[ $\beta$ -alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

21

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2002:933092 CAPLUS  
 DOCUMENT NUMBER: 138:321555  
 TITLE: Fluorescent cyclodextrin/peptide hybrids  
 with a novel guest-responsive chemosensor in the  
 peptide side chain  
 AUTHOR(S): Toyoda, Takayuki; Mihara, Hisakazu; Ueno, Akihiko  
 CORPORATE SOURCE: Department of Bioengineering, Graduate School of  
 Bioscience and Biotechnology, Tokyo Institute of  
 Technology, Yokohama, 226-8501, Japan  
 SOURCE: Macromolecular Rapid Communications (2002), 23(15),  
 905-908  
 CODEN: MRCOE3; ISSN: 1022-1336  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:321555

AB Peptides bearing  $\beta$ - cyclodextrin and  
 4-(N,N-dimethylamino)benzoyl (DMAB) units in the peptide side chains were  
 prepared as chemosensors for mol. detection. The DMAB unit was expected to  
 be included into the cyclodextrin cavity intramolecularly.  
 However, these peptides exhibited no twisted intramol. charge transfer  
 fluorescence and the normal fluorescence intensity decreased upon the  
 addition of 1-adamantanol as an exogenous guest, indicating that the DMAB  
 units are shallowly included in the cyclodextrin cavities.

IT 512847-95-9P 512847-96-0P 512847-97-1P  
512847-98-2P

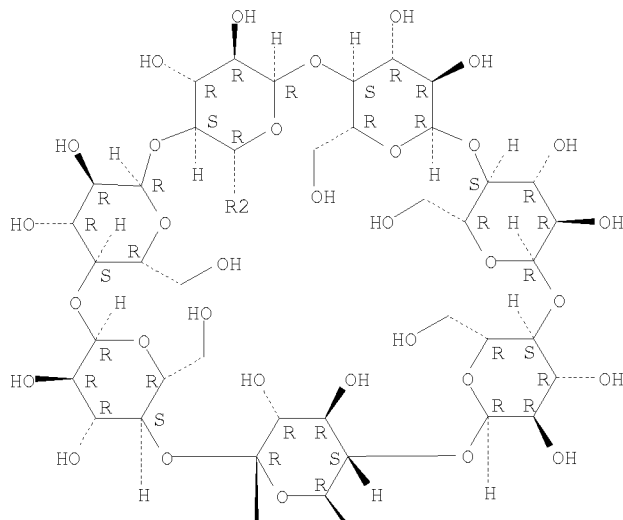
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (fluorescent cyclodextrin/peptide hybrids with novel  
 guest-responsive chemosensor in peptide side chain)

RN 512847-95-9 CAPLUS

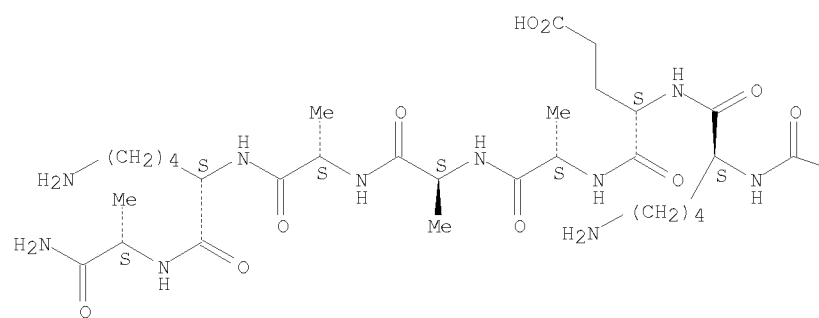
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy-  
 $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -  
 glutamyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-  
 $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

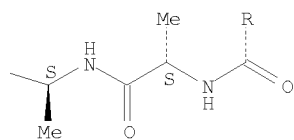
PAGE 1-A



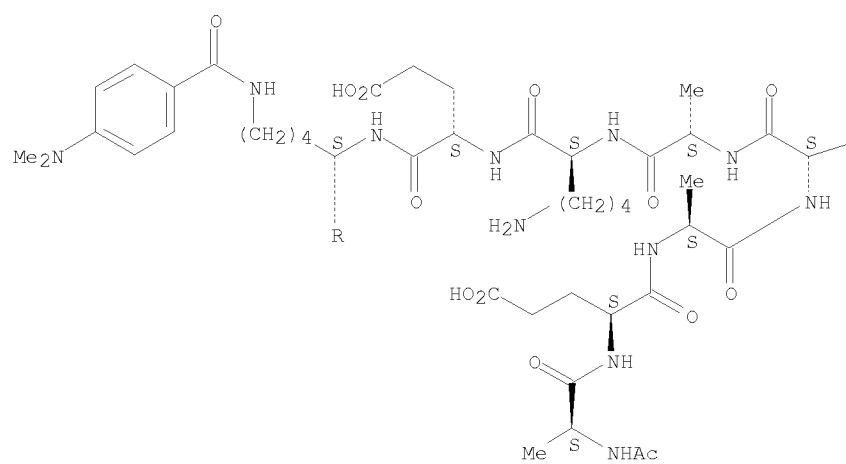
PAGE 2-A

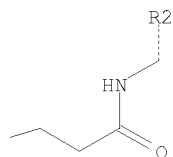


PAGE 2-B



PAGE 3-A

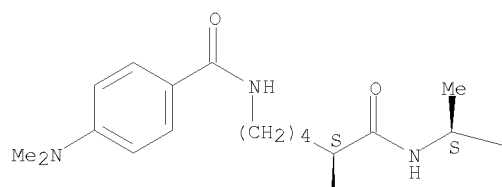
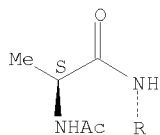
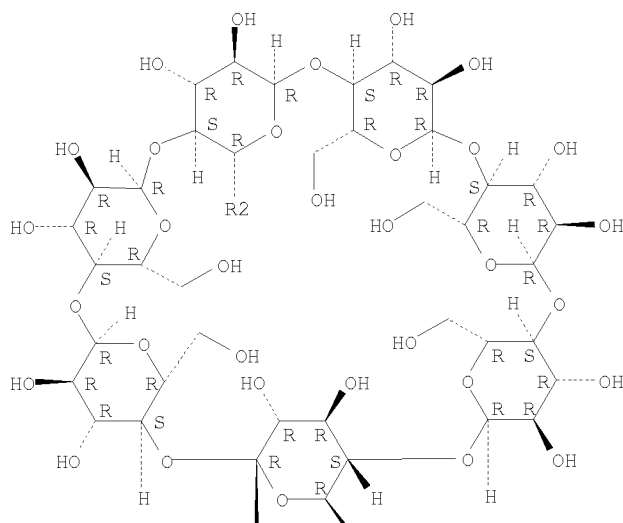


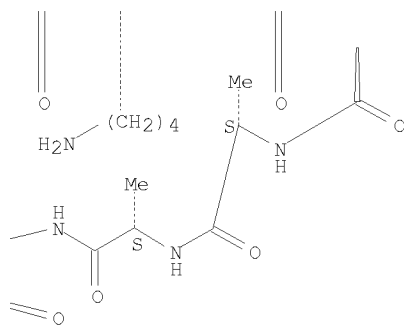
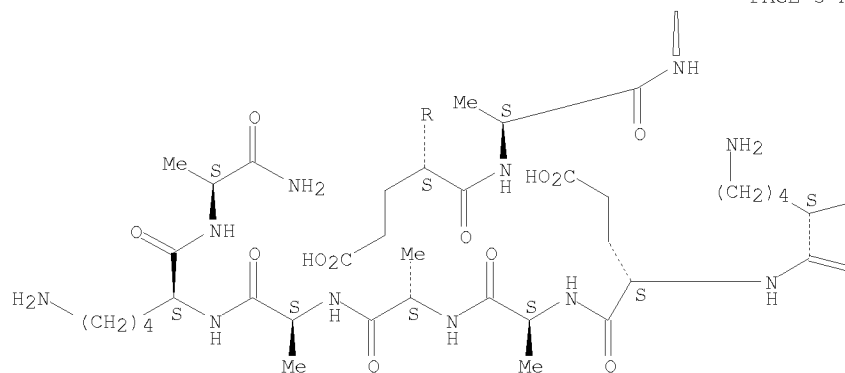
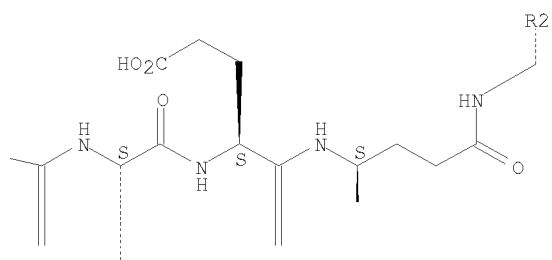


RN 512847-96-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



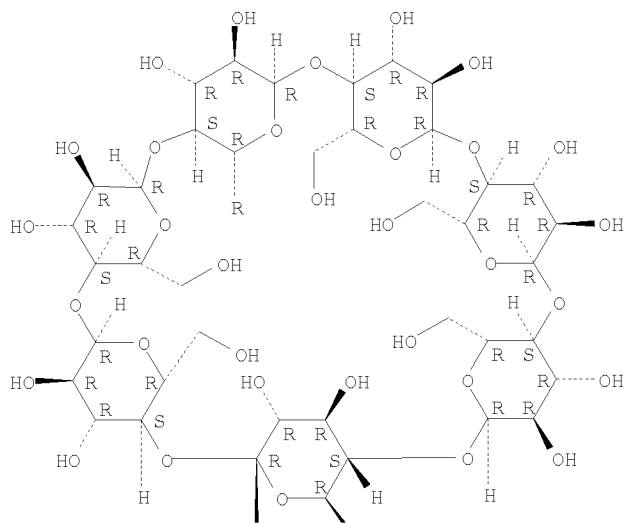


RN 512847-97-1 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)

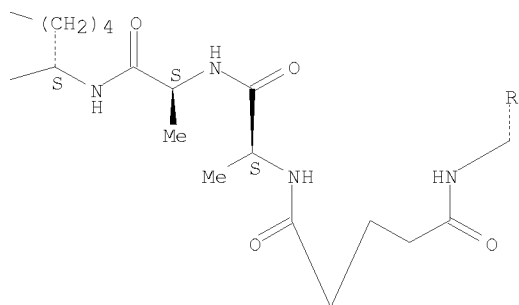
Absolute stereochemistry.

PAGE 1-A

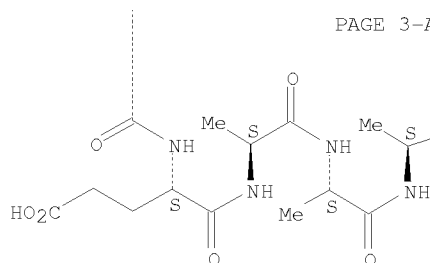


\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

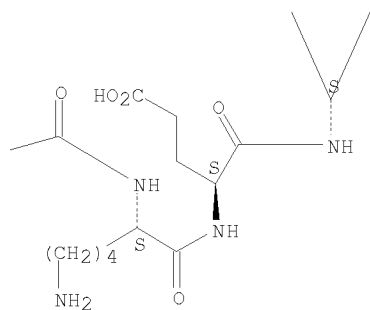
PAGE 2-B



PAGE 3-A



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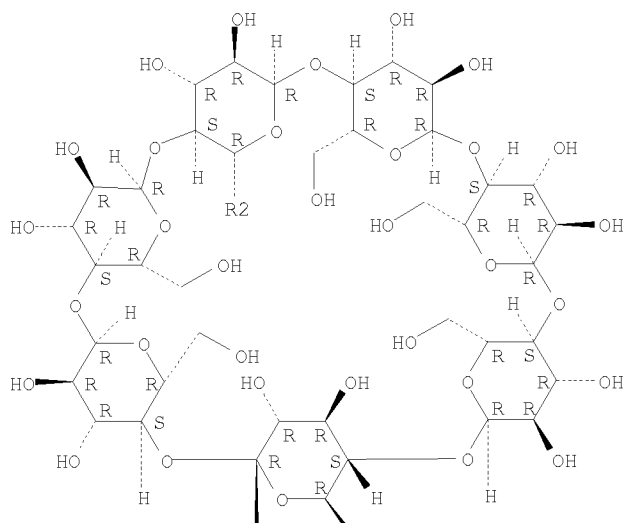


RN 512847-98-2 CAPLUS

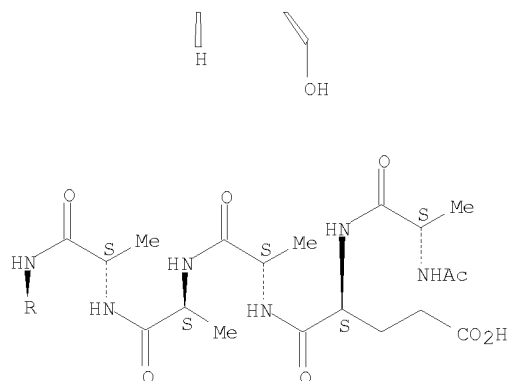
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

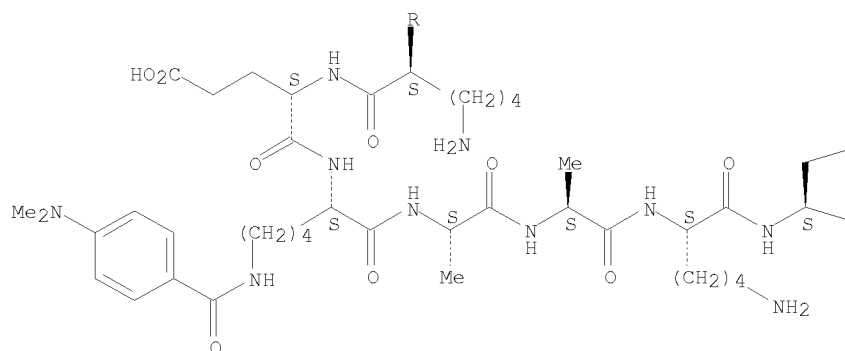
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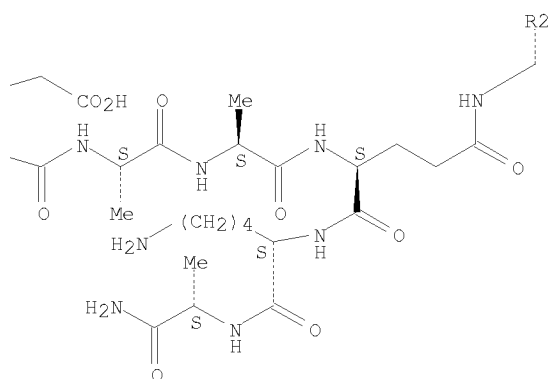
PAGE 2-A



PAGE 3-A



PAGE 3-B



IT **512847-99-3P** **512848-00-9P** **512848-01-0P**  
**512848-02-1P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (fluorescent **cyclodextrin**/peptide hybrids with novel  
 guest-responsive chemosensor in peptide side chain)

RN 512847-99-3 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy-  
 $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L- $\alpha$ -  
 glutamyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-

10576346

$\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with  
tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

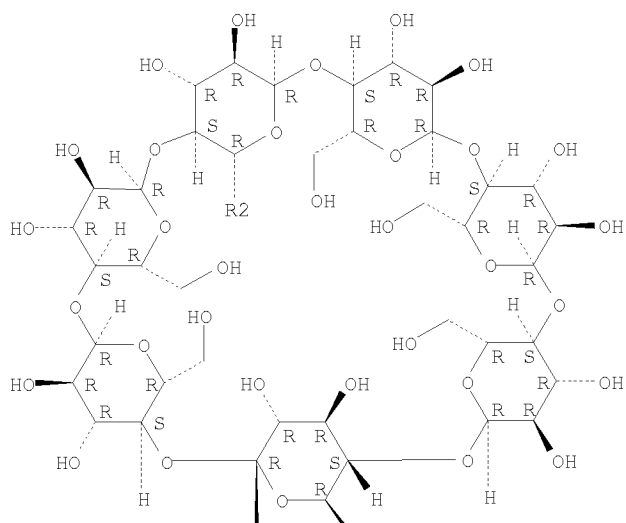
CM 1

CRN 512847-95-9

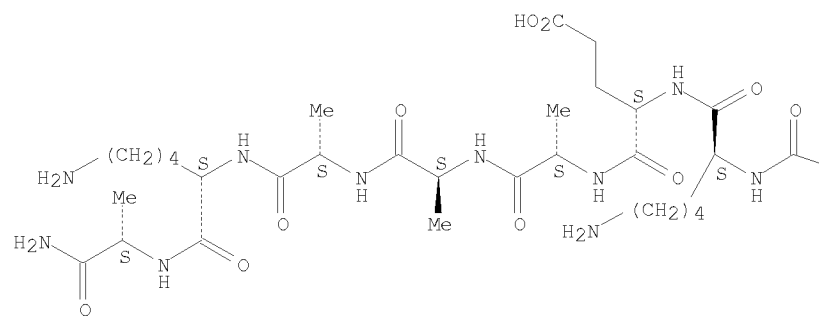
CMF C124 H204 N24 O60

Absolute stereochemistry.

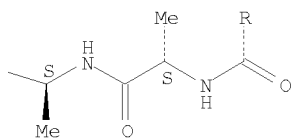
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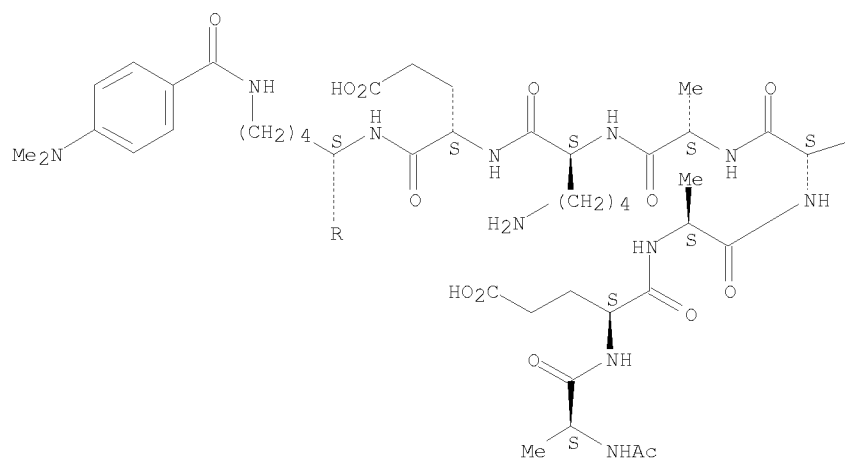
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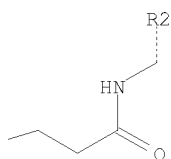
PAGE 2-B



PAGE 3-A



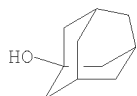
PAGE 3-B



CM 2

CRN 768-95-6

CMF C10 H16 O



RN 512848-00-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with

10576346

tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

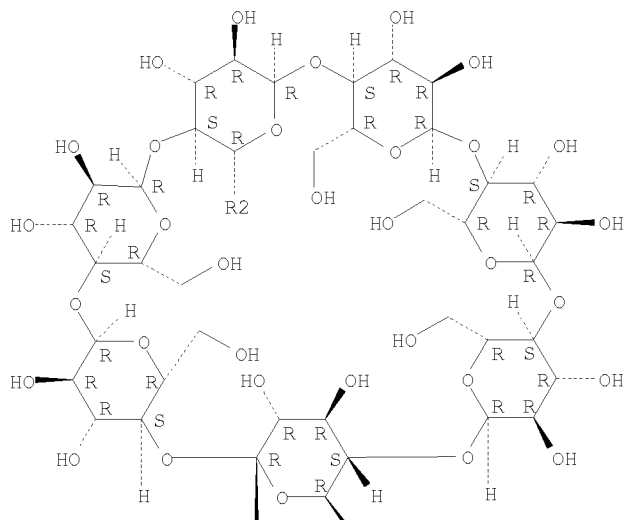
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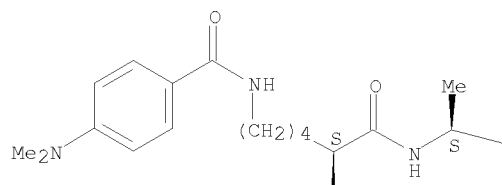
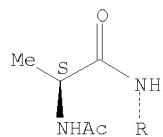
CMF C124 H204 N24 O60

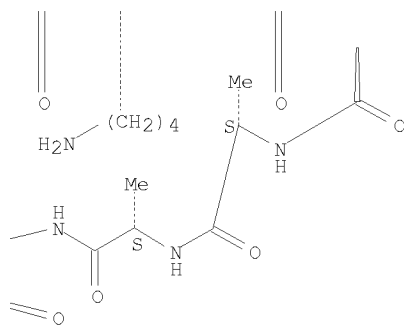
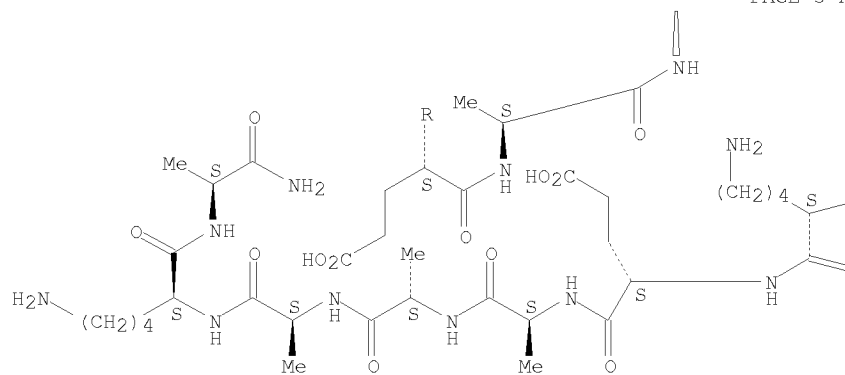
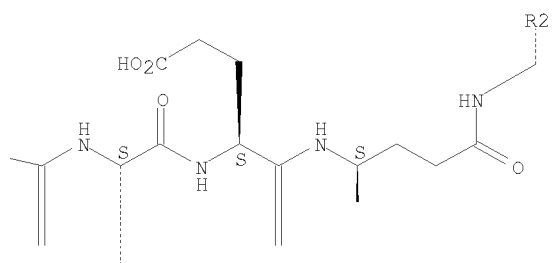
Absolute stereochemistry.

PAGE 1-A



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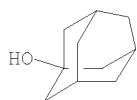




CM 2

CRN 768-95-6

CMF C10 H16 O



RN 512848-01-0 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-lysyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

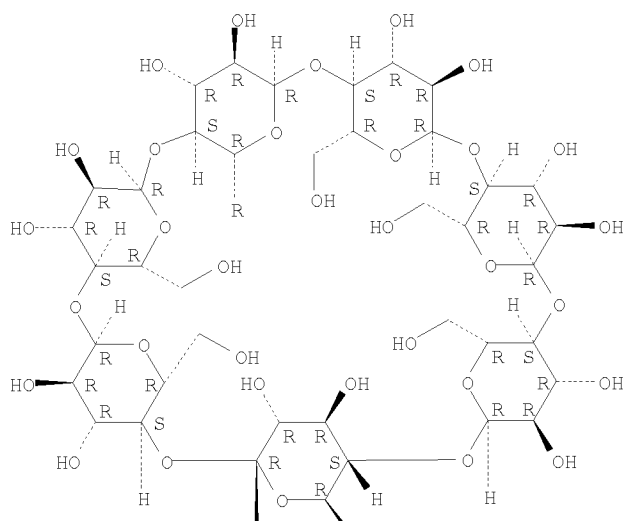
CM 1

CRN 512847-97-1

CMF C124 H204 N24 O60

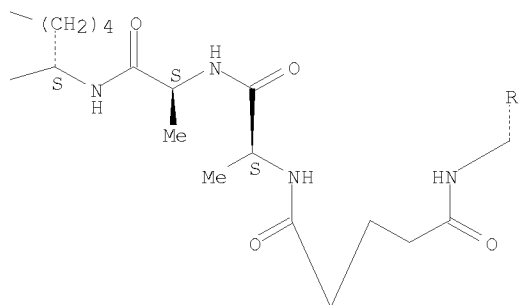
Absolute stereochemistry.

PAGE 1-A

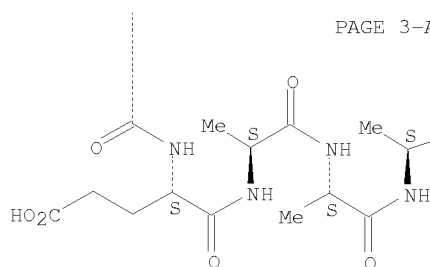


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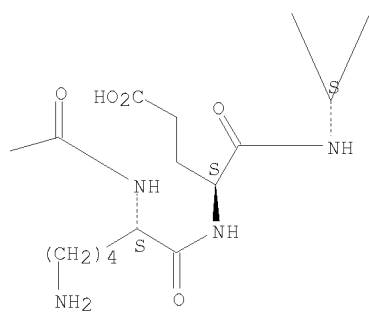
PAGE 2-B



PAGE 3-A

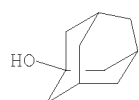


PAGE 3-B



CM 2

CRN 768-95-6  
CMF C10 H16 O



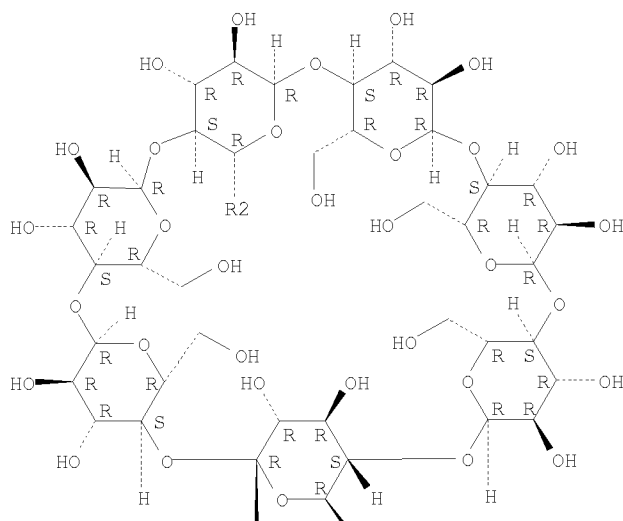
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 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[4-(dimethylamino)benzoyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

CM 1

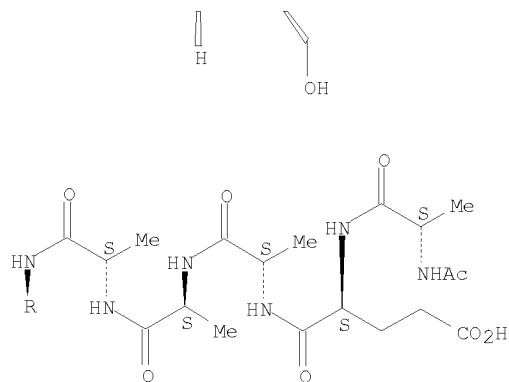
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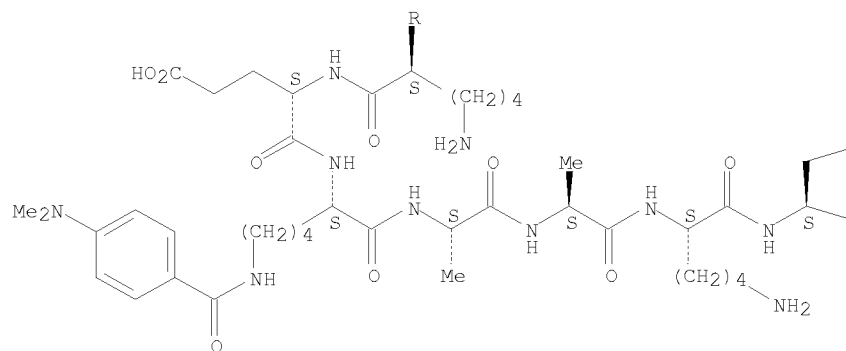
Absolute stereochemistry.

PAGE 1-A

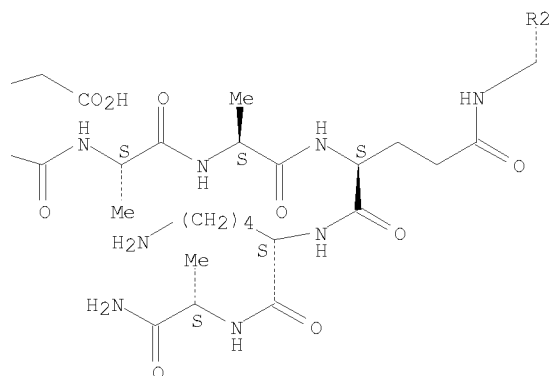


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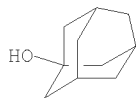




PAGE 3-B



CRN 768-95-6  
CMF C10 H16 O



L8 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2002:537097 CAPLUS  
DOCUMENT NUMBER: 137:295212  
TITLE: Synthesis of new carnosine derivatives of  $\beta$ -cyclodextrin and their hydroxyl radical scavenger ability  
AUTHOR(S): La Mendola, Diego; Sortino, Salvatore; Vecchio, Graziella; Rizzarelli, Enrico  
CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, I-95125, Italy  
SOURCE: Helvetica Chimica Acta (2002), 85(6), 1633-1643  
CODEN: HCACAV; ISSN: 0018-019X  
PUBLISHER: Verlag Helvetica Chimica Acta  
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:295212

AB Several in vitro and in vivo studies have suggested that carnosine can act as a scavenger of reactive oxygen species and intracellular proton buffer. On the other hand, carnosinase is a specific peptidase able to destroy the biol. active dipeptide. To overcome this constraint,  $\beta$ -cyclodextrin ( $\beta$ -CD) was functionalized with carnosine to give the following new compds.: 6A-[(3-[(1S)-1-carboxy-2-(1H-imidazol-4-yl)ethyl]amino)-3-oxopropyl]amino]-6A-deoxy- $\beta$ -cyclodextrin (1), 6A-[( $\beta$ -alanyl-L-histidyl)amino]- $\beta$ -cyclodextrin (2), and (2AS,3AR)-3A-[(3-[(1S)-1-carboxy-2-(1H-imidazol-4-yl)ethyl]amino)-3-oxopropyl]amino]-3A-deoxy- $\beta$ -cyclodextrin (3). Pulse-radiolysis investigation showed that the  $\beta$ -CD derivs. 1-3 are excellent scavengers of OH $\cdot$  radicals. Their activity is not only due to the formation of the stable imidazole-centered radical, but also to the scavenger ability of the glucose moieties of the macrocycle. This effect is independent of the disposition of the imidazole ring. In fact, the quenching constant values are similar for the three compds.

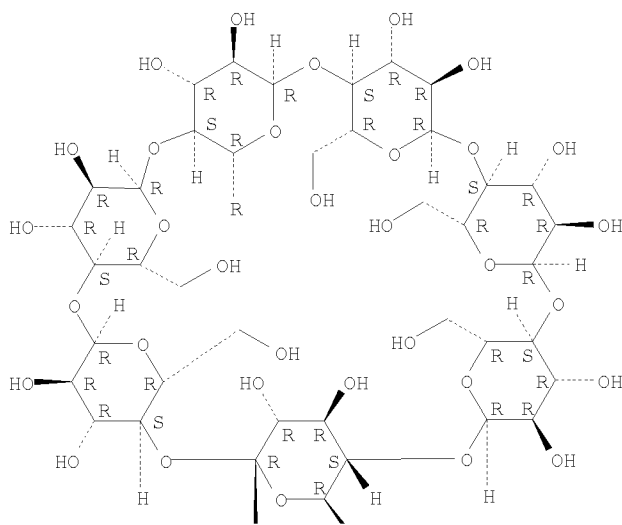
IT **393100-96-4P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and hydroxyl radical scavenging activity of carnosine derivs. of  $\beta$ -cyclodextrin)

RN 393100-96-4 CAPLUS

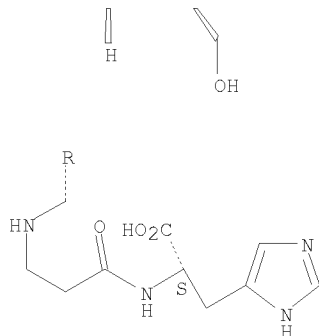
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:517607 CAPLUS

DOCUMENT NUMBER: 138:238413

TITLE: Diastereomeric dipeptide derivatives possessing terminal host and guest groups

AUTHOR(S): Nonomura, Tsutomu; Tanaka, Tomohiko; Yamamura, Hatsuo; Araki, Shuki; Kawai, Masao

CORPORATE SOURCE: Department of Applied Chemistry, Nagoya Institute of Technology, Nagoya, 466-8555, Japan

SOURCE: Peptide Science (2002), Volume Date 2001, 38th, 269-272

CODEN: PSCIFQ; ISSN: 1344-7661

PUBLISHER: Japanese Peptide Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A symposium report. Diastereomeric dialanyl peptides containing  $\beta$ -cyclodextrin (CyD-OH) and 1-adamantyl (Adm) moieties, namely Adm-CO-L/D-Ala-L/D-Ala-NH-CyD and CyD-SCH<sub>2</sub>CO-L/D-Ala-L/D-Ala-NH-Adm, were prepared. Large chemical shift differences between the diastereotopic  $\delta$ -CH<sub>2</sub> protons of Adm group indicated strong interterminal host-guest interaction in these diastereomeric dipeptides. External guest-induced conformational change of the latter peptides was suggested by the <sup>1</sup>H NMR spectral change caused by the addition of Adm-CO<sub>2</sub>Na in D<sub>2</sub>O.

IT 501699-57-6P 501699-58-7P 501699-59-8P  
501699-60-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

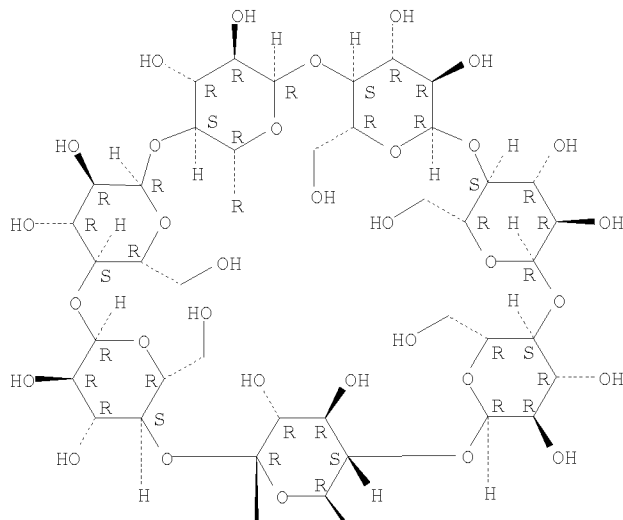
(preparation and proton NMR of diastereomeric dialanine derivs. having  $\beta$ -cyclodextrin and adamantyl terminal host and guest groups)

RN 501699-57-6 CAPLUS

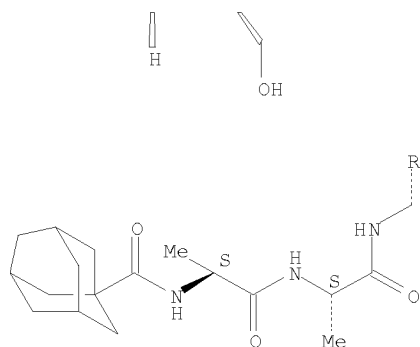
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)-L-alanyl-L-alanyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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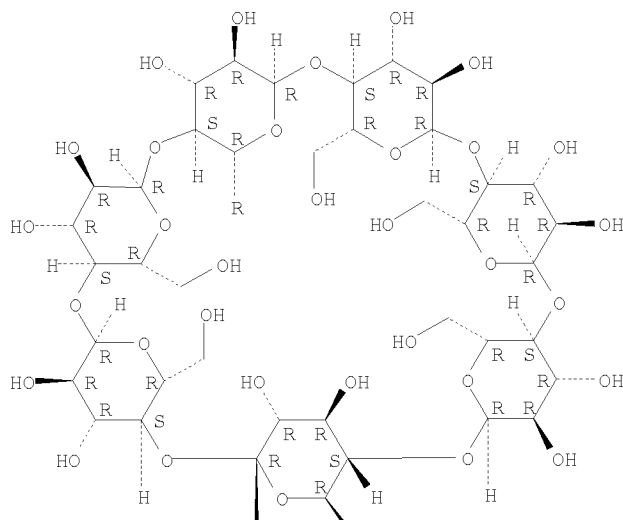


RN 501699-58-7 CAPLUS

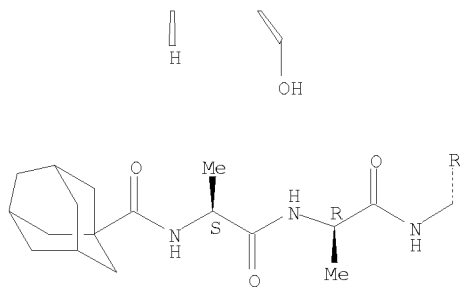
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)-L-alanyl-D-alanyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



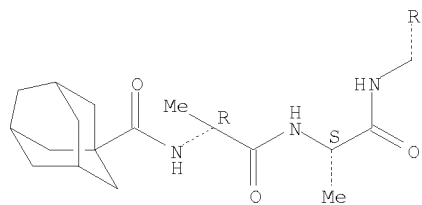
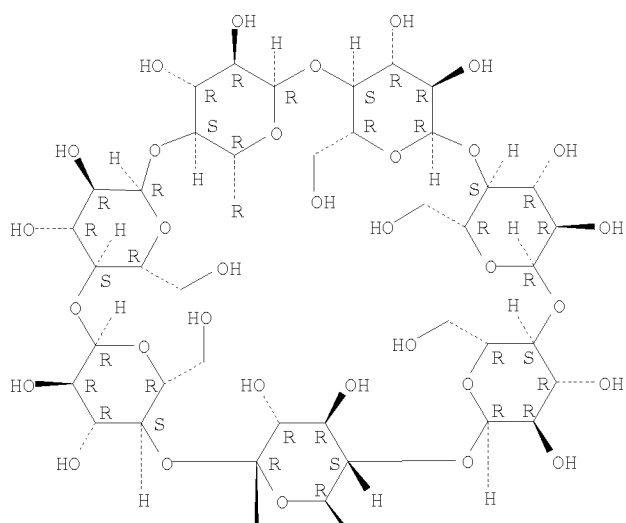
PAGE 2-A



RN 501699-59-8 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)-D-alanyl-L-alanyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

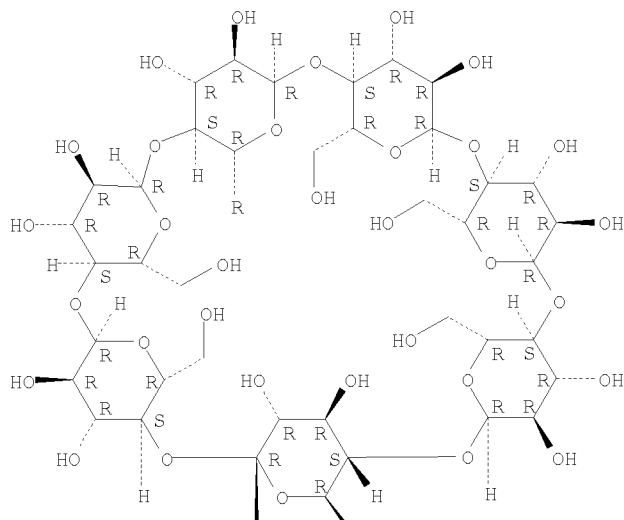


RN 501699-60-1 CAPLUS

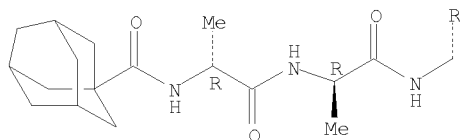
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-(tricyclo[3.3.1.1.3,7]dec-1-ylcarbonyl)-D-alanyl-D-alanyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:452099 CAPLUS

DOCUMENT NUMBER: 137:263244

TITLE: (Ethylenediaminetetraacetic acid)cerium(IV)  
[CeIV(EDTA)] complexes with dual hydrophobic binding sites as highly efficient catalysts for the hydrolysis of phosphodiesterases

AUTHOR(S): Yan, Jia-Ming; Atsumi, Masato; Yuan, De-Qi; Fujita, Kahee

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Nagasaki University, Nagasaki, 852-8521, Japan

SOURCE: Helvetica Chimica Acta (2002), 85(5), 1496-1504  
CODEN: HCACAV; ISSN: 0018-019X

PUBLISHER: Verlag Helvetica Chimica Acta

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:263244

AB  $\beta$ -cyclodextrin ( $\beta$ -CD) derivs. with an amino group at C(6), C(3), or C(2) were homogeneously linked together by an EDTA bridge to give dual cavity dimers (I). Coordination of the linker to metal ions and cooperation of the dual cavities of I in binding hydrophobic guests were properly demonstrated by NMR techniques and a fluorescence-based titration method, resp. The hydrolysis of bis(4-nitrophenyl) phosphate (BNPP) in the presence of CeIV complexes of  $\beta$ -CD dimers I was tens of millionfold faster than that in the absence of the CeIV complexes. Hydrophobic binding of the  $\beta$ -CD cavities was estimated to contribute to

the catalysis by a factor of up to 520, and the type of modified sugar unit and the bridging positions influenced this cooperation between the  $\beta$ -CD moieties and the catalytic metal center.

IT **432023-87-5P**

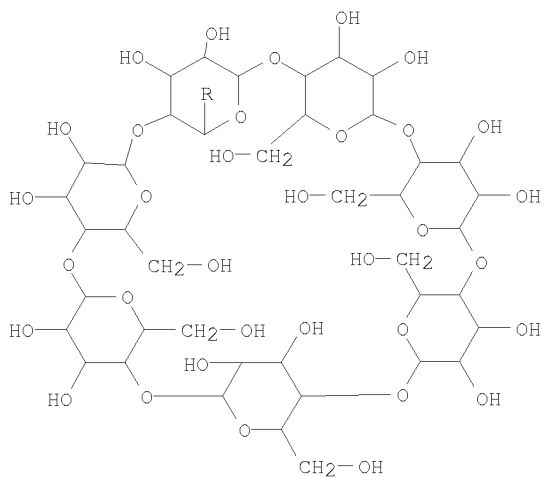
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of in the preparation of linked aminocycloheptasaccharides capable of forming complexes with cerium ions)

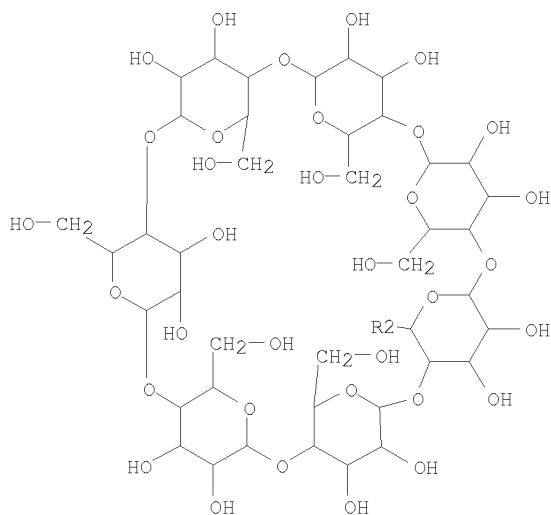
RN 432023-87-5 CAPLUS

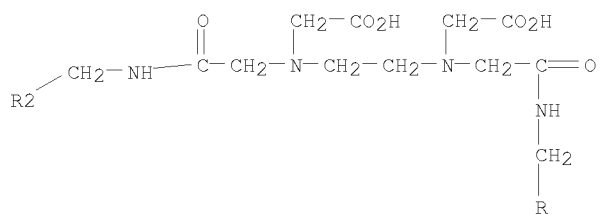
CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

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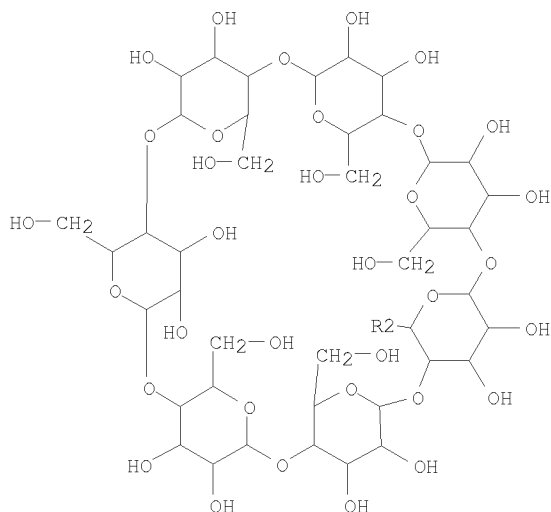
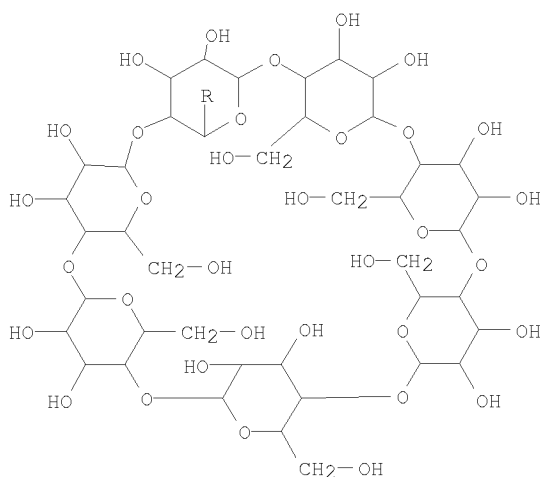


IT **432023-87-5DP**, cerium complex containing **462121-22-8P**  
**462121-23-9P**

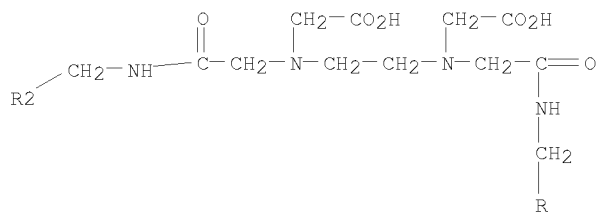
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of as catalysts for the hydrolysis of phosphodiester)

RN 432023-87-5 CAPLUS

CN  **$\beta$ -Cyclodextrin**, 6A,6'A-[1,2-ethanediylbis[[ (carboxymethyl)imino] (1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)



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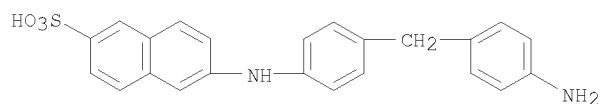
RN 462121-22-8 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-, compd. with  
6-[[4-[(4-aminophenyl)methyl]phenyl]amino]-2-naphthalenesulfonic acid  
monosodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 462121-21-7

CMF C23 H20 N2 O3 S . Na



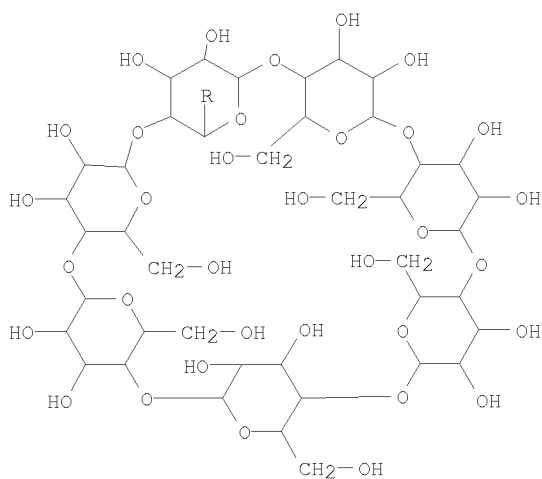
● Na

CM 2

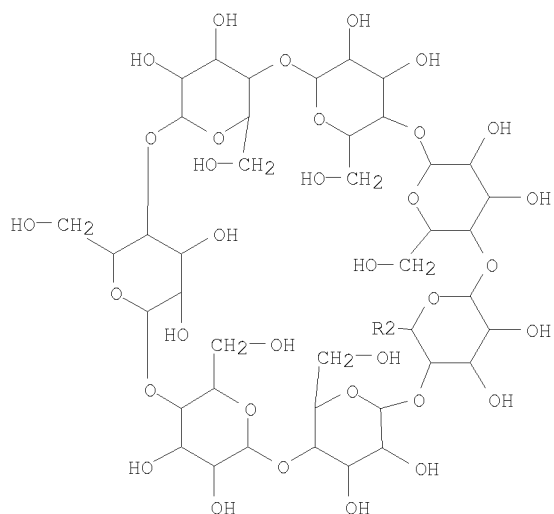
CRN 432023-87-5

CMF C94 H154 N4 O74

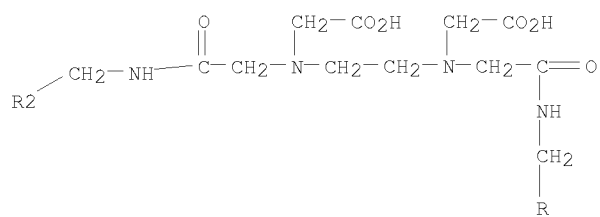
PAGE 1-A



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PAGE 3-A

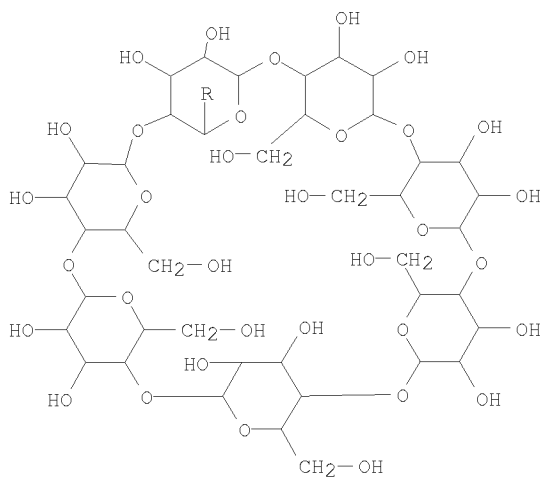


RN 462121-23-9 CAPLUS  
 CN Glycine, N,N'-1,2-ethanediylbis[N-[2-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-2-oxoethyl]-, compd. with  
 6,6'-[methylenebis(4,1-phenyleneimino)]bis[2-naphthalenesulfonic acid]  
 disodium salt (1:1) (9CI) (CA INDEX NAME)

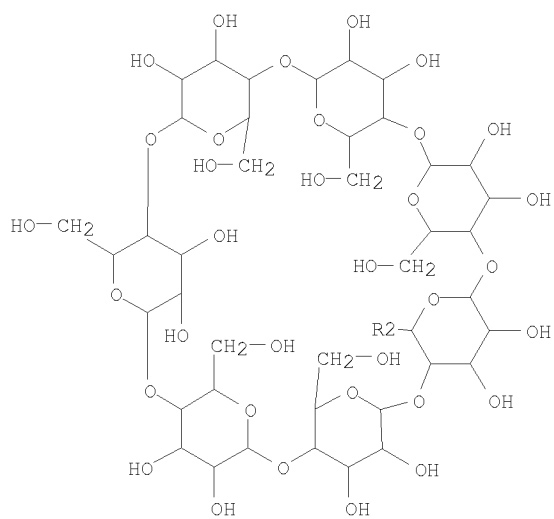
CM 1

CRN 432023-87-5  
 CMF C94 H154 N4 O74

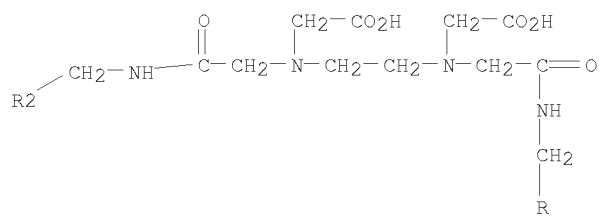
PAGE 1-A



PAGE 2-A



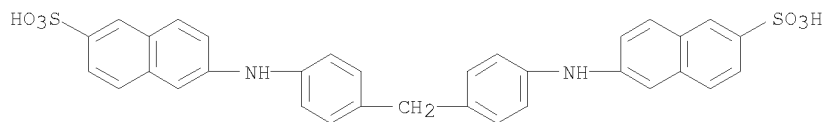
PAGE 3-A



CM 2

CRN 152310-62-8

CMF C33 H26 N2 O6 S2 . 2 Na



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:219695 CAPLUS

DOCUMENT NUMBER: 137:2575

TITLE: The first successful investigation into a cyclodextrin-based enzyme model as an efficient catalyst for luminol chemiluminescent reaction

AUTHOR(S): Yuan, De-Qi; Lu, Jianzhong; Atsumi, Masato; Izuka, Ayako; Kai, Masaaki; Fujita, Kahee

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Nagasaki University, Nagasaki, 852-8521, Japan

SOURCE: Chemical Communications (Cambridge, United Kingdom) (2002), (7), 730-731

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The chemiluminescence of the luminol-H<sub>2</sub>O<sub>2</sub> system is found for the first time to be remarkably enhanced by the Ce(IV) complexes of cyclodextrin dimers.

IT **432023-87-5P 432023-89-7P**

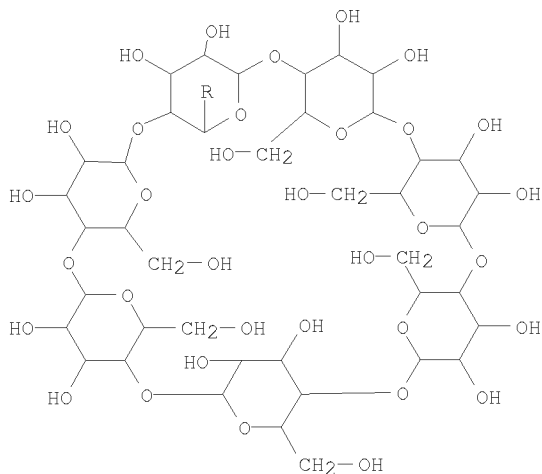
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(cyclodextrin-based enzyme model as efficient catalyst for luminol chemiluminescent reaction)

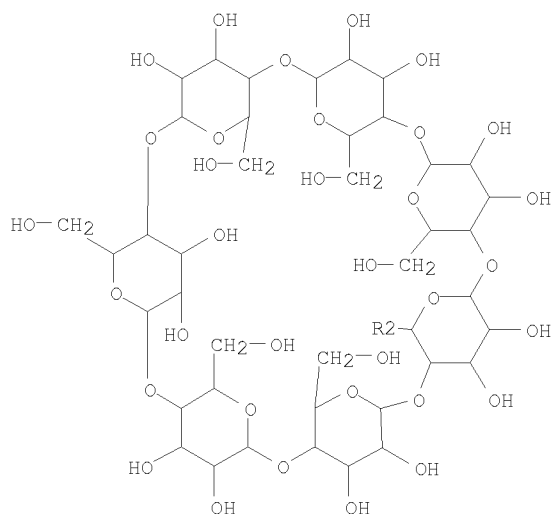
RN 432023-87-5 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy- (CA INDEX NAME)

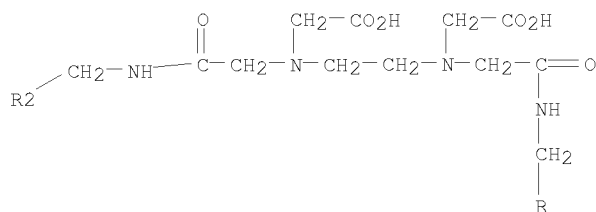
PAGE 1-A



PAGE 2-A



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RN 432023-89-7 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A-[1,2-ethanediylbis[[[(carboxymethyl)imino](1-oxo-2,1-ethanediyl)imino]]bis[6A-deoxy-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- (CA INDEX NAME)]

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:108042 CAPLUS

DOCUMENT NUMBER: 136:340978

TITLE: Double naphthalene-tagged cyclodextrin  
-peptide capable of exhibiting guest-induced  
naphthalene excimer fluorescence

AUTHOR(S): Yana, Dewi; Shimizu, Tomoko; Hamasaki, Keita; Mihara,  
Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering, Graduate School of  
Bioscience and Biotechnology, Tokyo Institute of  
Technology, Yokohama, 226-8501, Japan

SOURCE: Macromolecular Rapid Communications (2002), 23(1),  
11-15

CODEN: MRCOE3; ISSN: 1022-1336

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A cyclodextrin-peptide hybrid (17NN $\beta$ ) bearing two  
naphthalene units in the peptide side chain has been designed and  
synthesized as a novel chemosensor mol. CD study of the compound revealed  
that the peptide has  $\alpha$ -helix structure with a helix content of 41%.  
The peptide revealed both monomer and excimer emission and the intensity

of the excimer emission increased while that of the monomer emission decreased upon addition of the guest compound. This behavior was observed for various guest mols., suggesting that the system can be used for detecting mols. in aqueous solution.

IT **418769-91-2** **418769-92-3** **418769-93-4**  
**418769-94-5** **418769-95-6** **418769-96-7**  
**418769-97-8** **418769-98-9**

RL: PRP (Properties)

(preparation of naphthalene- and cyclodextrin-substituted peptide for use as fluorescent chemosensor mol.)

RN 418769-91-2 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd. with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

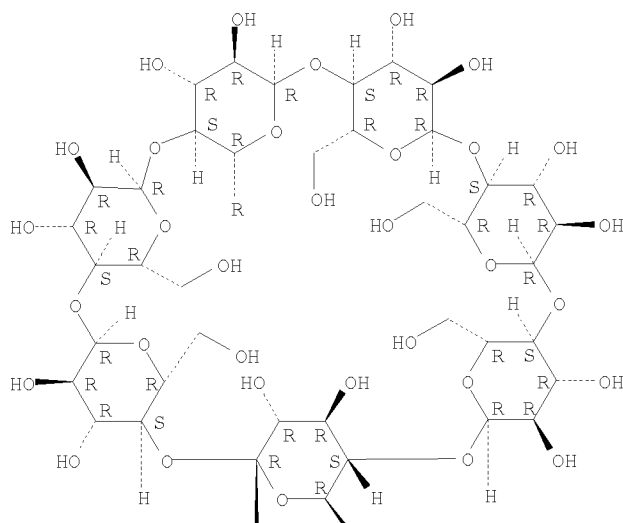
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CRN 418769-90-1

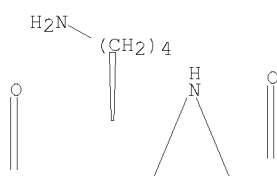
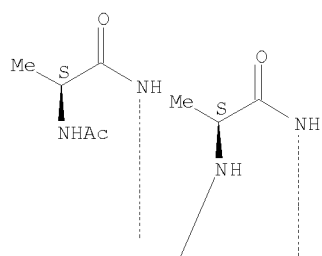
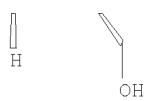
CMF C142 H218 N24 O61

Absolute stereochemistry.

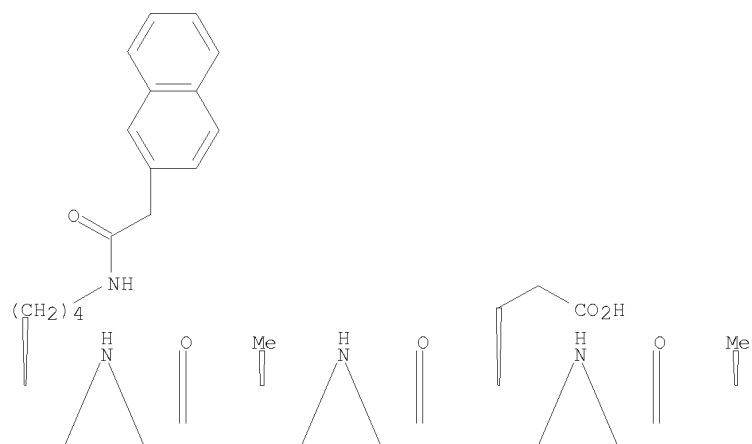
PAGE 1-A

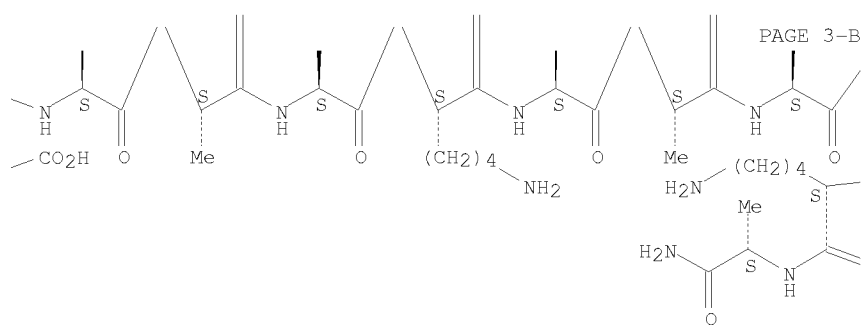
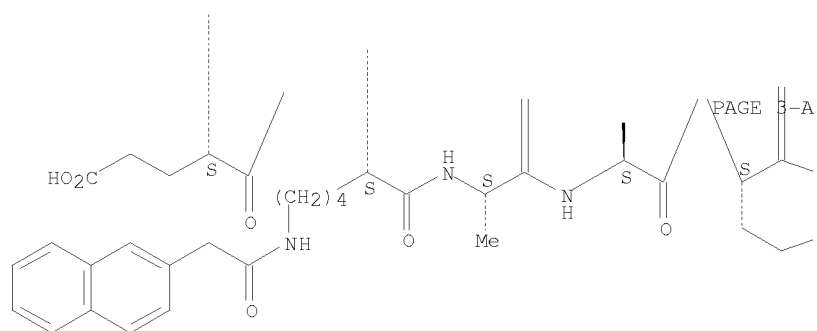
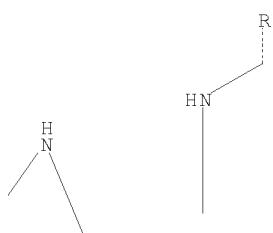


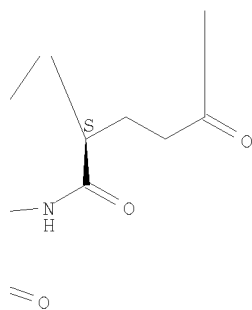
PAGE 2-A



PAGE 2-B





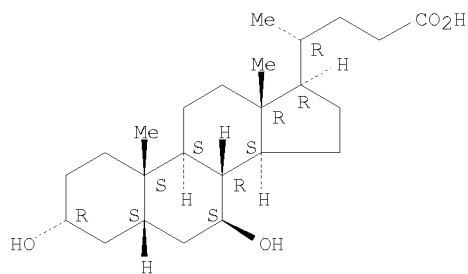


PAGE 3-C

CM 2

CRN 128-13-2  
 CMF C24 H40 O4

Absolute stereochemistry.



RN 418769-92-3 CAPLUS

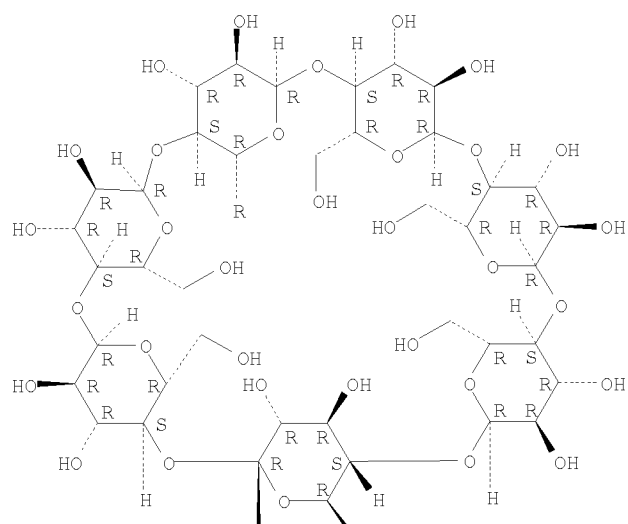
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

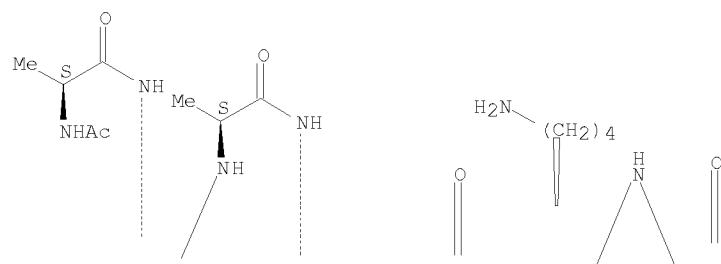
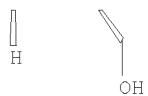
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 CMF C142 H218 N24 O61

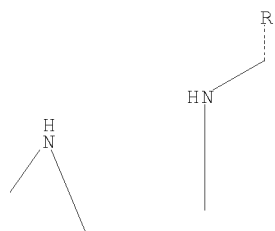
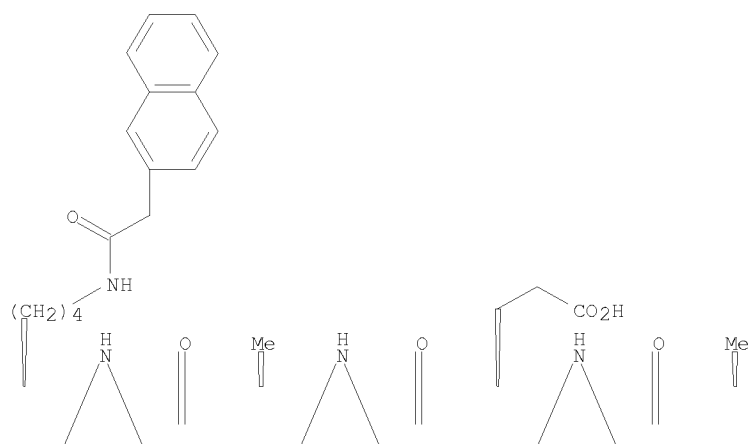
Absolute stereochemistry.

PAGE 1-A

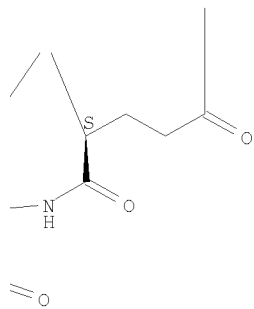
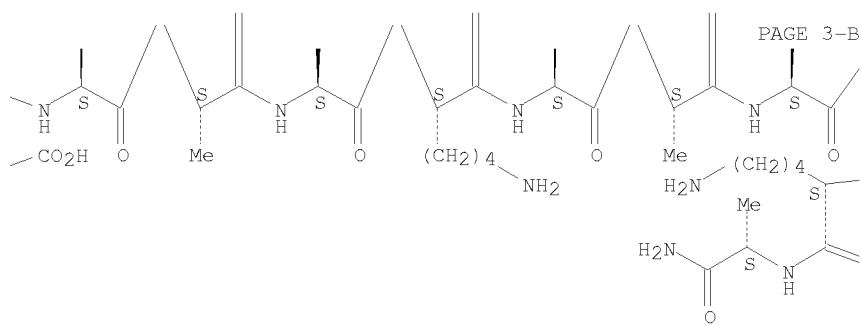
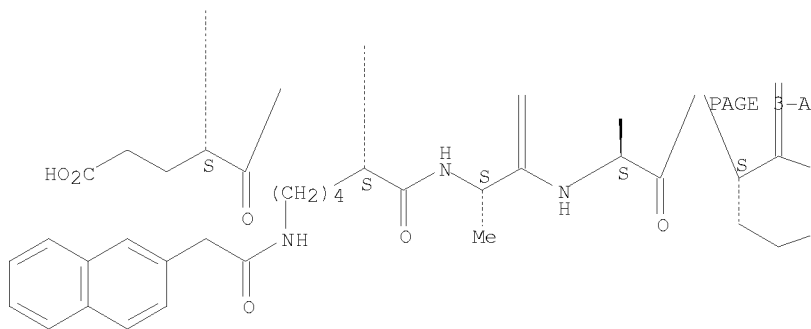


PAGE 2-A





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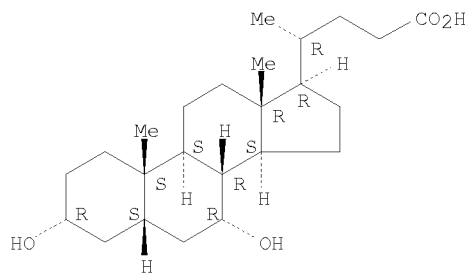
PAGE 3-C

CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 418769-93-4 CAPLUS

CN Cholan-24-oic acid, 3-hydroxy-, (3 $\alpha$ ,5 $\beta$ )-, compd. with  
 N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-  
 lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-  
 lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L-alaninamide (1:1)  
 (9CI) (CA INDEX NAME)

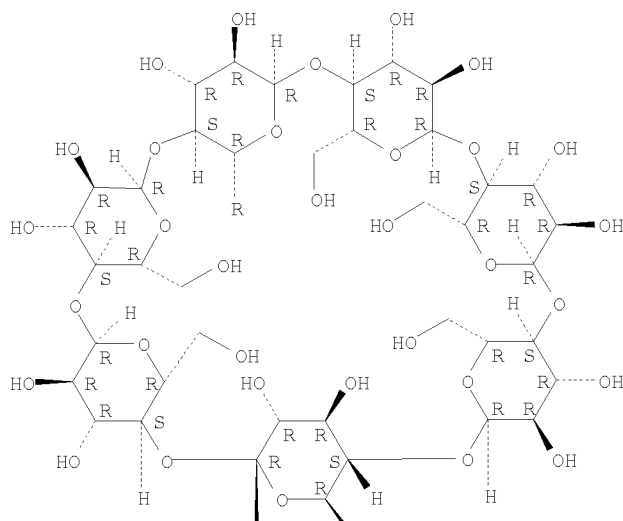
CM 1

CRN 418769-90-1

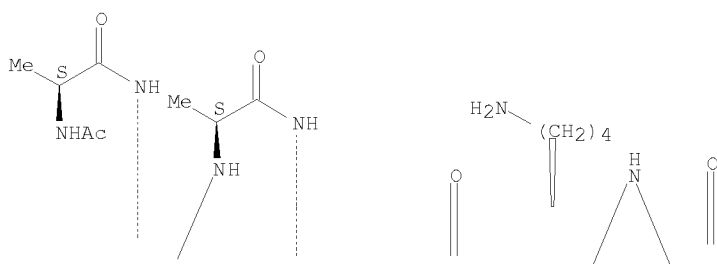
CMF C142 H218 N24 O61

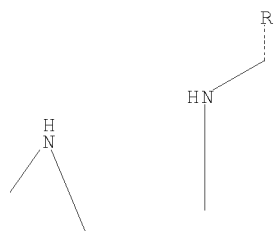
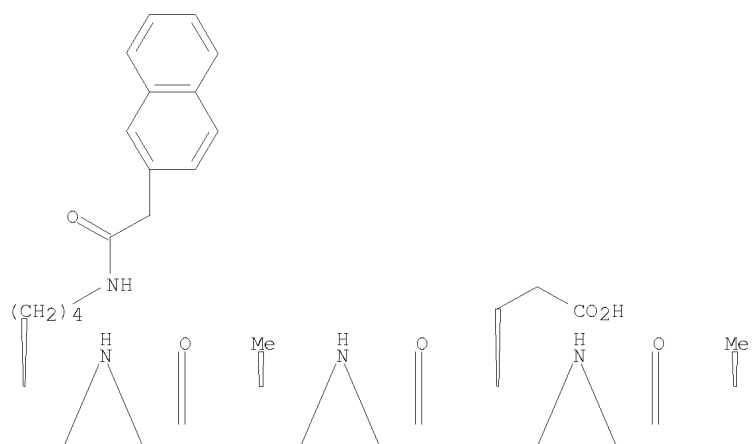
Absolute stereochemistry.

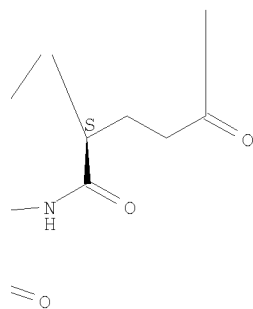
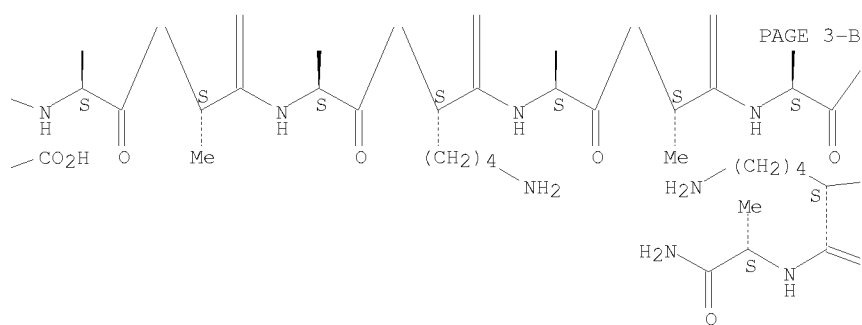
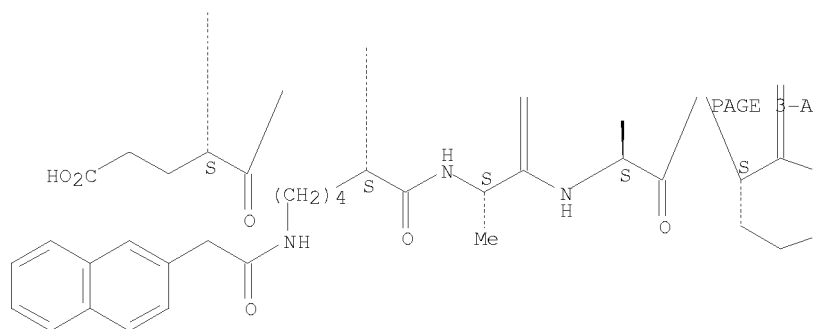
PAGE 1-A



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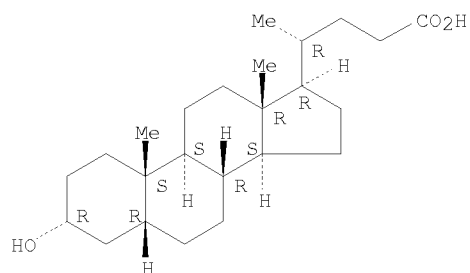


CM 2

CRN 434-13-9

CMF C24 H40 O3

Absolute stereochemistry.



RN 418769-94-5 CAPLUS

CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

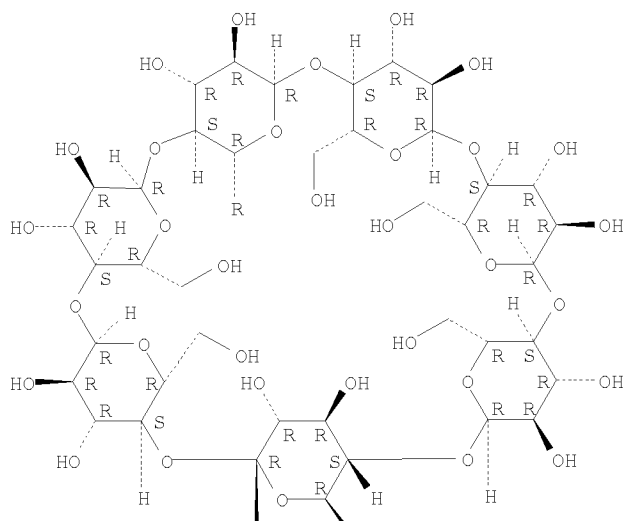
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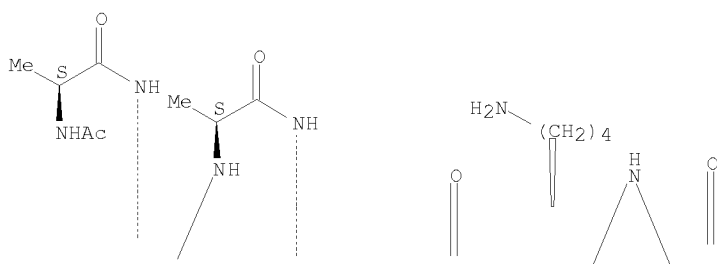
CMF C142 H218 N24 O61

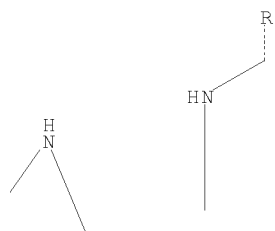
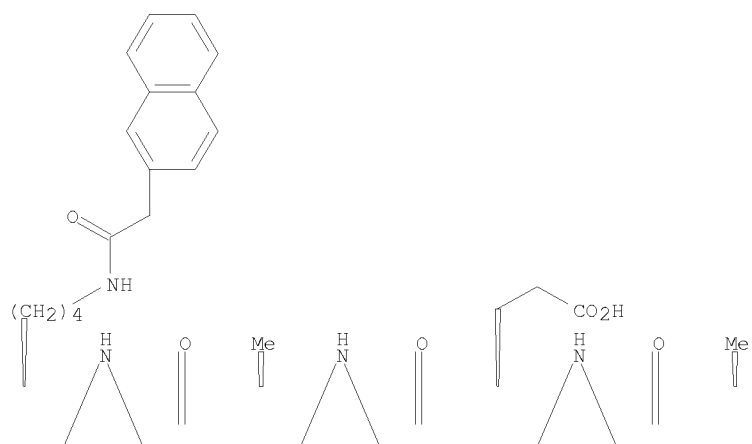
Absolute stereochemistry.

PAGE 1-A

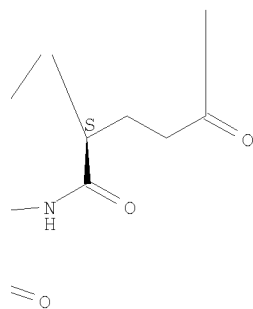
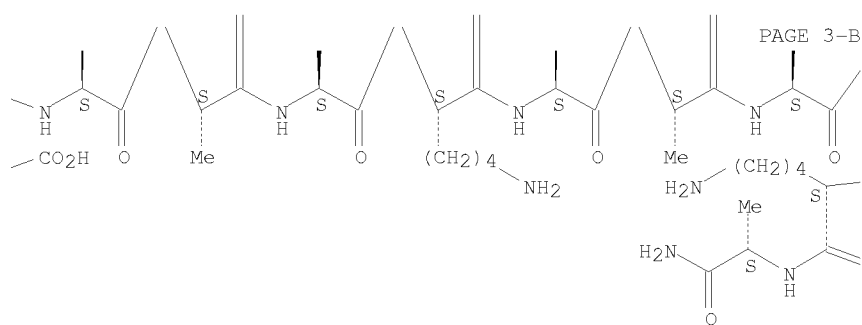
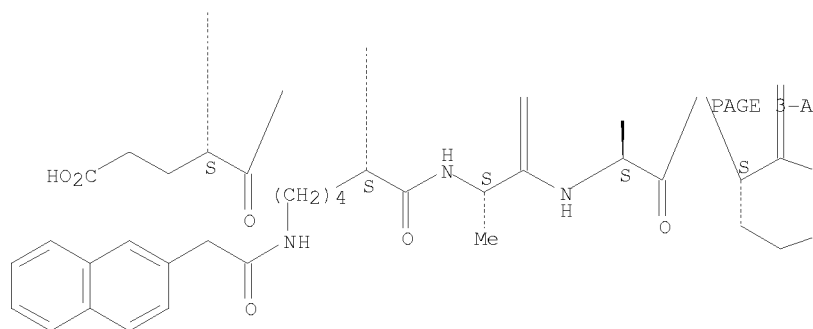


PAGE 2-A





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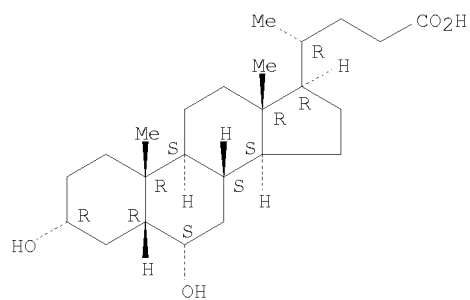
PAGE 3-C

CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



RN 418769-95-6 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

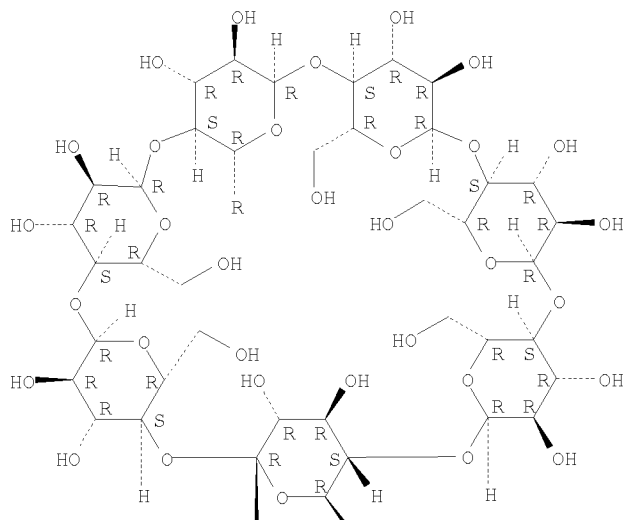
CM 1

CRN 418769-90-1

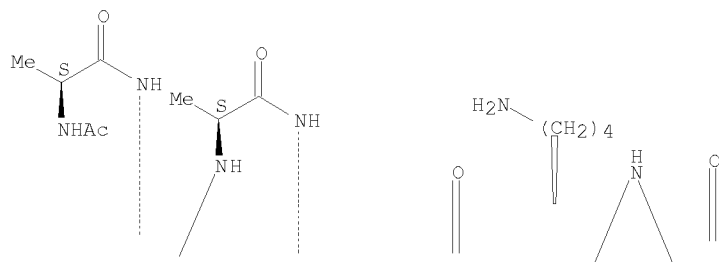
CMF C142 H218 N24 O61

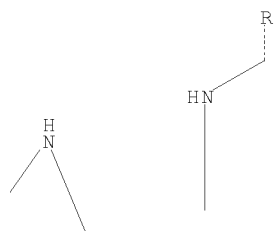
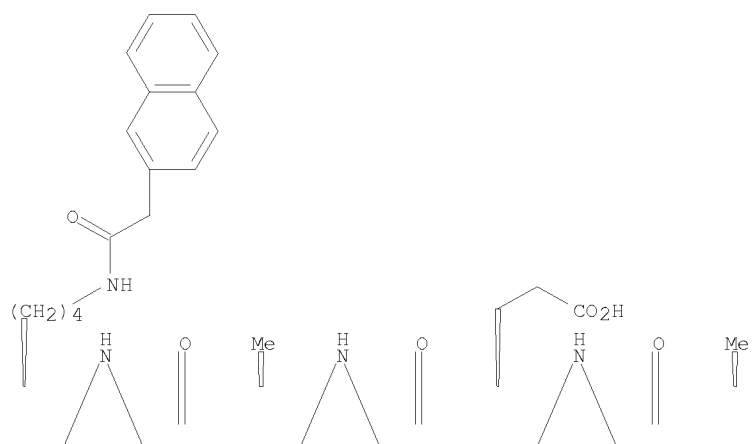
Absolute stereochemistry.

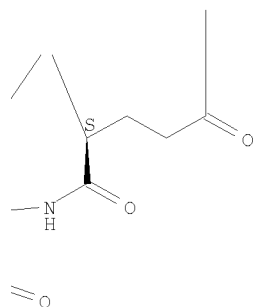
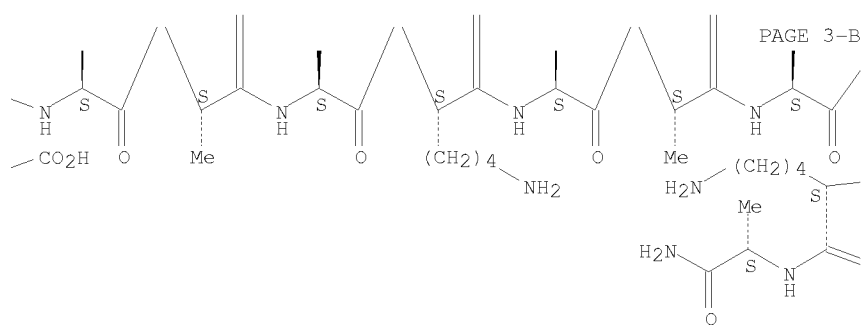
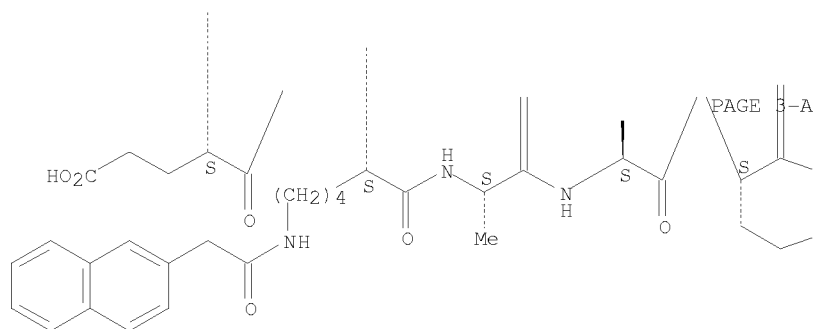
PAGE 1-A



PAGE 2-A



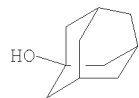




CM 2

CRN 768-95-6

CMF C10 H16 O



RN 418769-96-7 CAPLUS

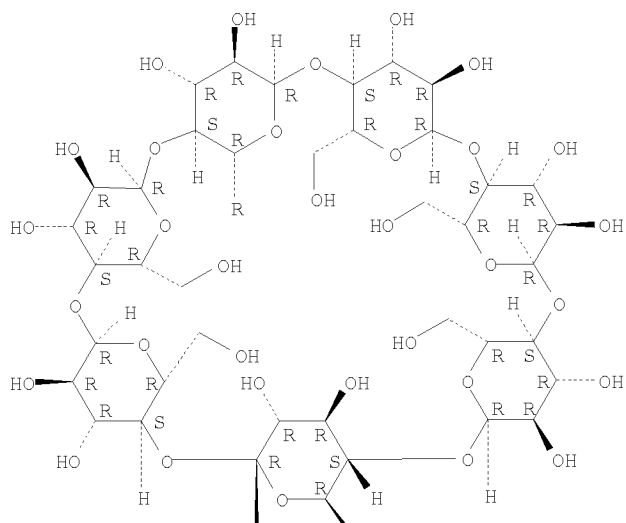
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-, compd. with tricyclo[3.3.1.1.3]decan-2-ol (1:1) (9CI) (CA INDEX NAME)

CM 1

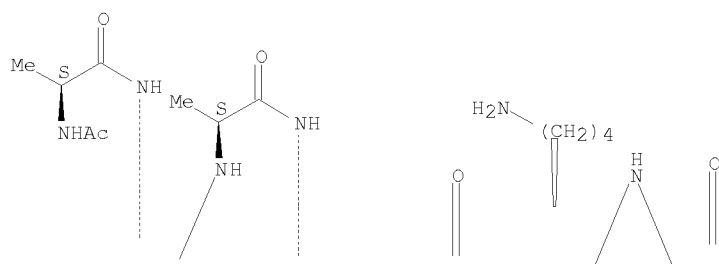
CRN 418769-90-1  
 CMF C142 H218 N24 O61

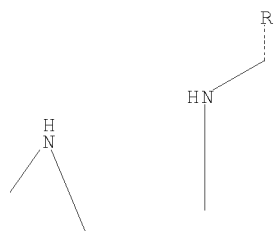
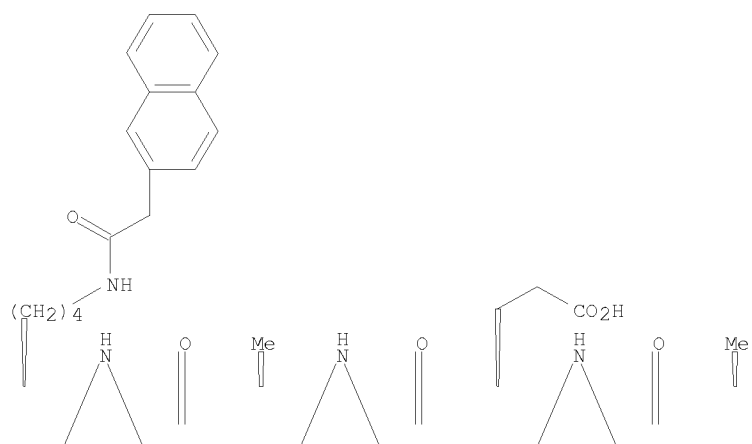
Absolute stereochemistry.

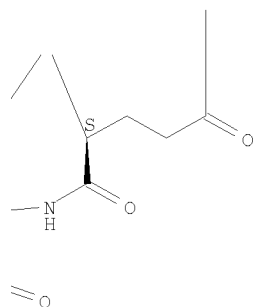
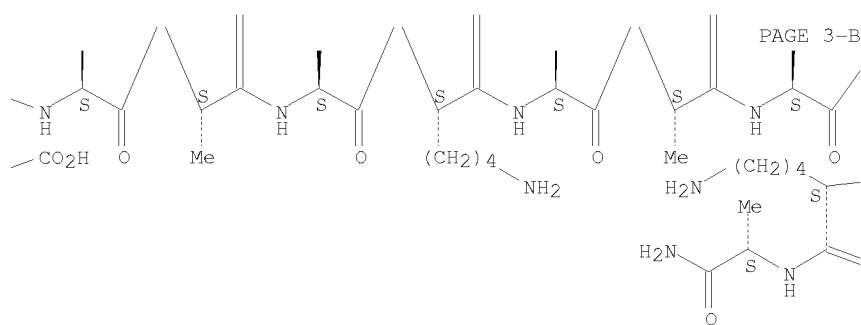
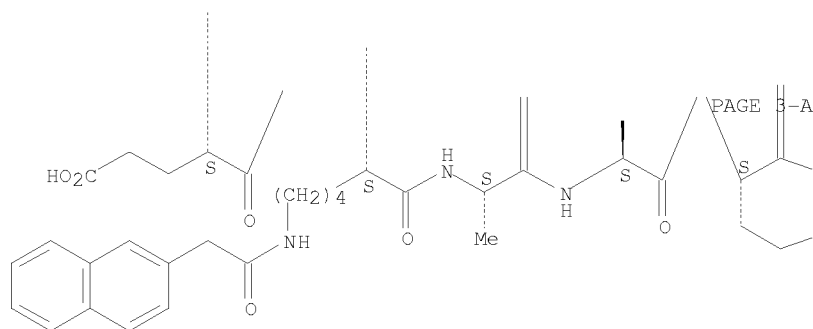
PAGE 1-A



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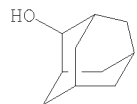




PAGE 3-C

CM 2

CRN 700-57-2  
CMF C10 H16 O



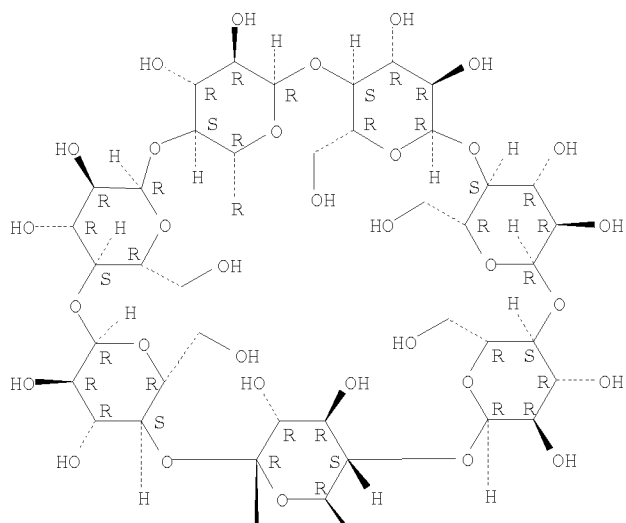
RN 418769-97-8 CAPLUS  
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-, compd. with (1S,2R,4S)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-ol (1:1) (9CI) (CA INDEX NAME)

CM 1

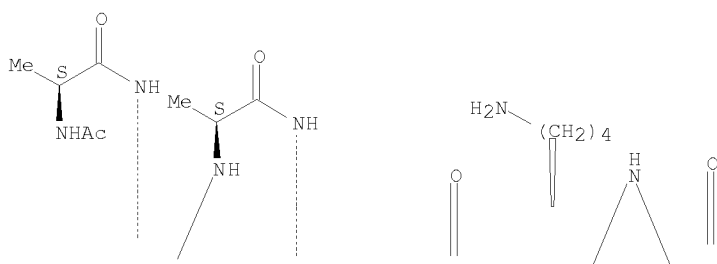
CRN 418769-90-1  
 CMF C142 H218 N24 O61

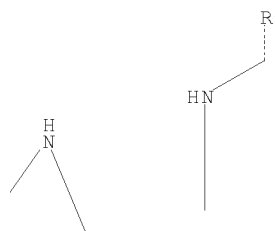
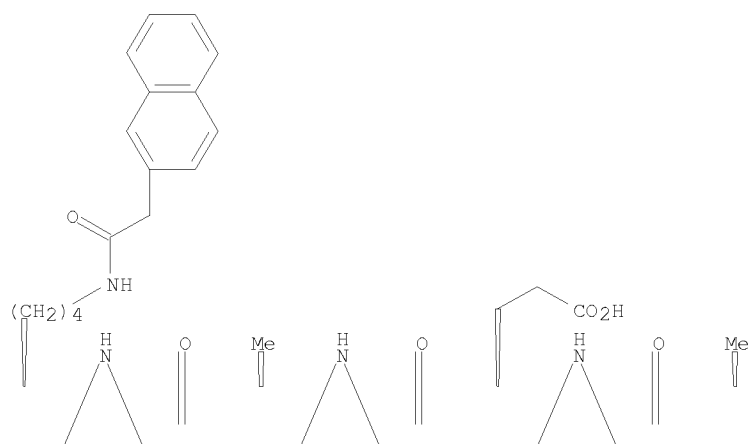
Absolute stereochemistry.

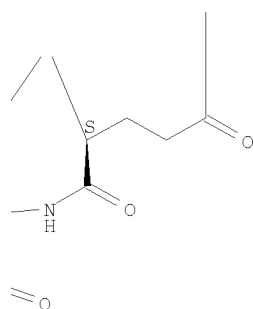
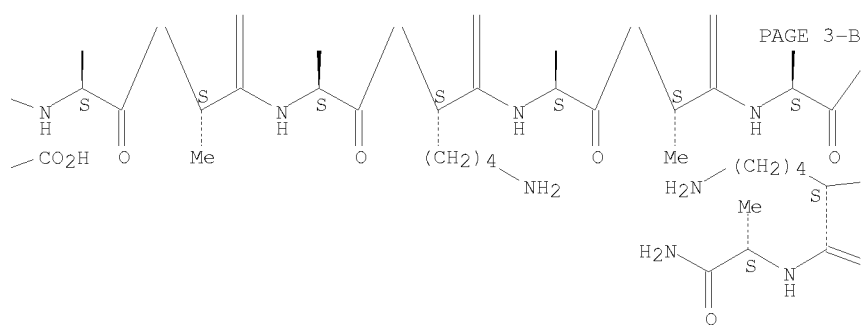
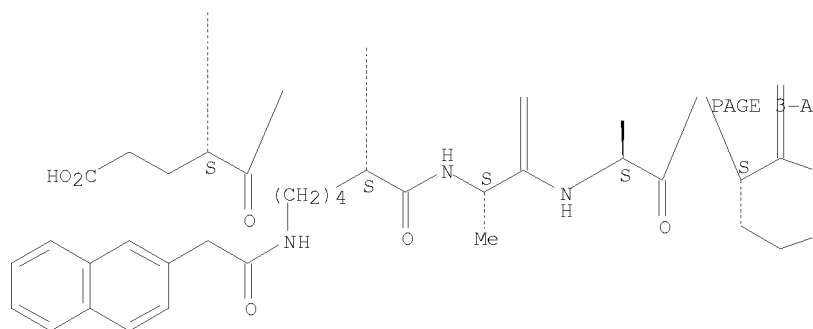
PAGE 1-A



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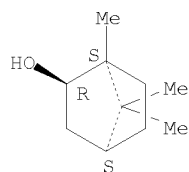
PAGE 3-C

CM 2

CRN 464-45-9

CMF C10 H18 O

Absolute stereochemistry. Rotation (-).



RN 418769-98-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-

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lysyl-, compd. with (1R,2S,4R)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-ol  
(1:1) (9CI) (CA INDEX NAME)

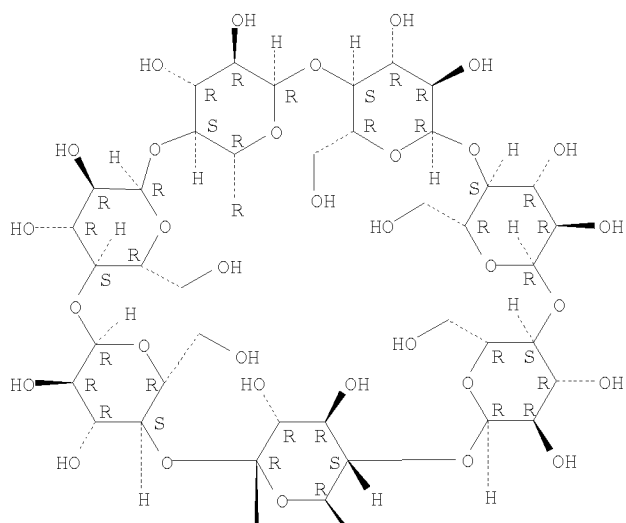
CM 1

CRN 418769-90-1

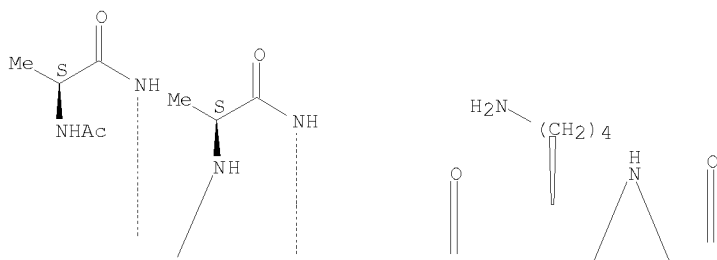
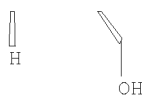
CMF C142 H218 N24 O61

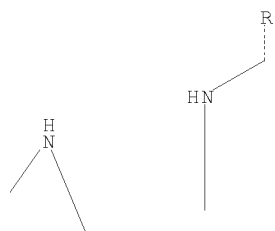
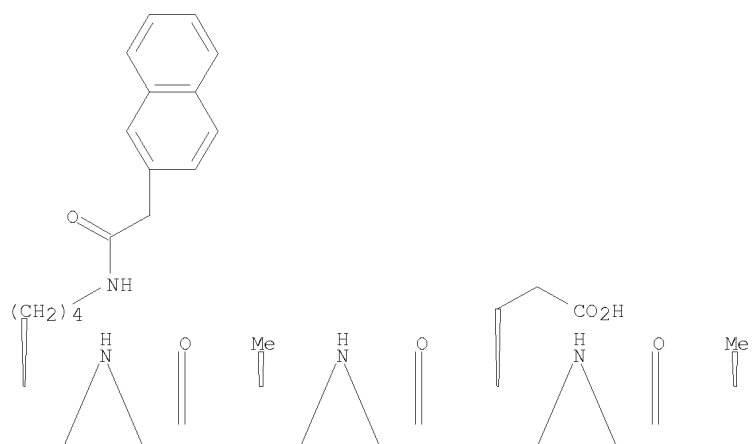
Absolute stereochemistry.

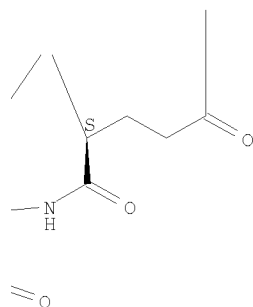
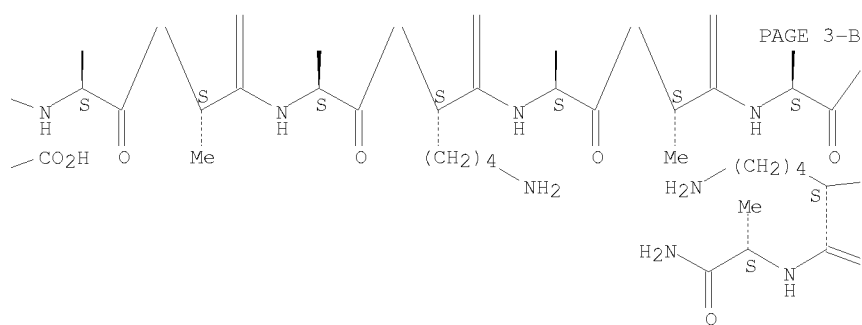
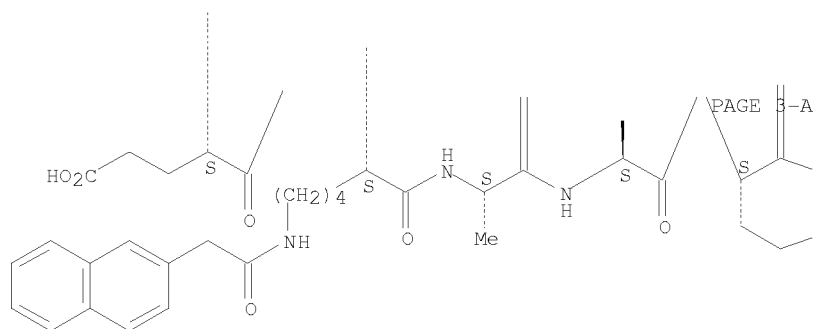
PAGE 1-A



PAGE 2-A







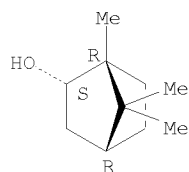
PAGE 3-C

CM 2

CRN 464-43-7

CMF C10 H18 O

Absolute stereochemistry. Rotation (+).

IT **418769-90-1**

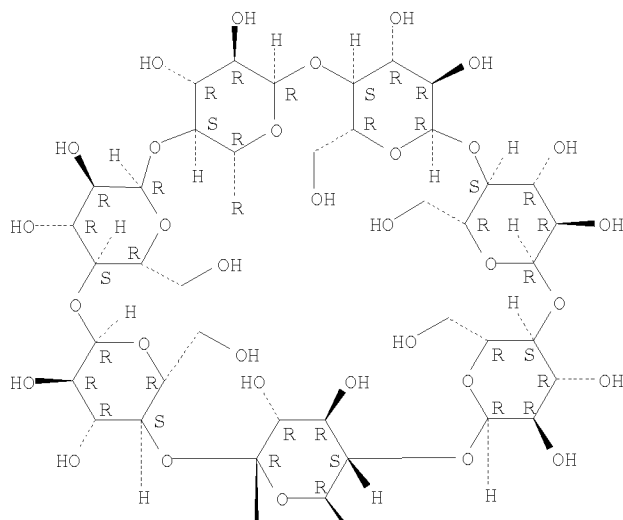
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of naphthalene- and cyclodextrin-substituted peptide  
 for use as fluorescent chemosensor mol.)

RN 418769-90-1 CAPLUS

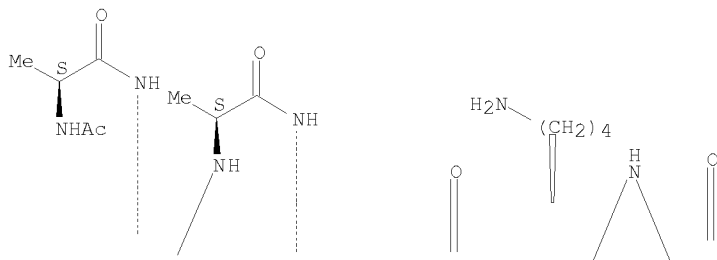
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl- (9CI) (CA INDEX NAME)

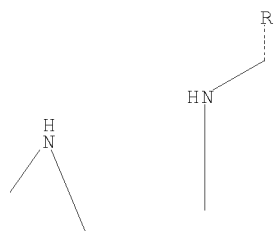
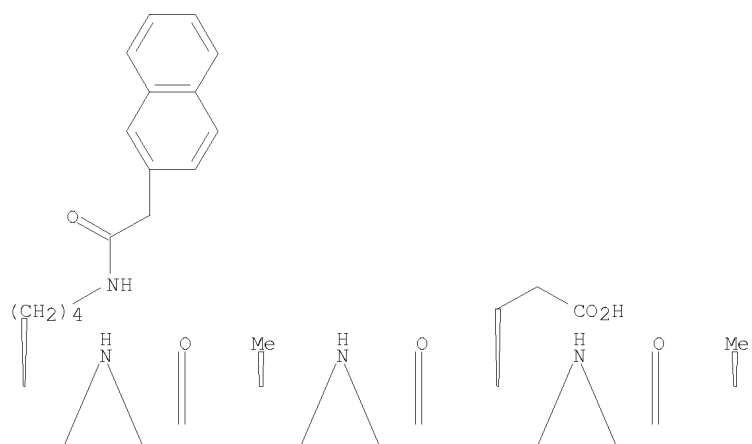
Absolute stereochemistry.

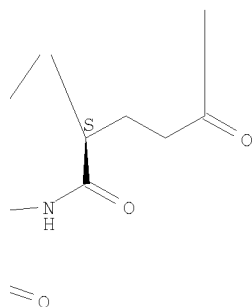
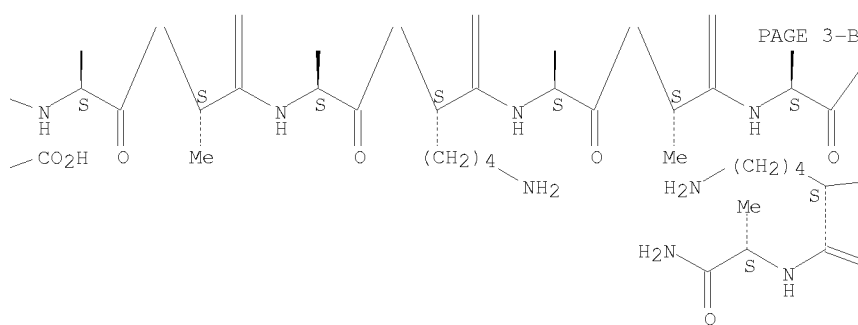
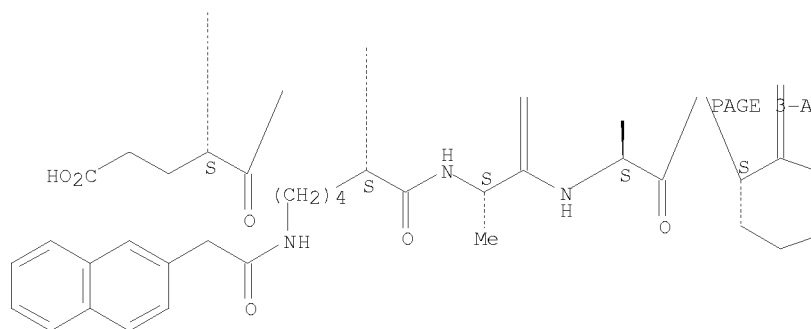
PAGE 1-A



PAGE 2-A







REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:87200 CAPLUS

DOCUMENT NUMBER: 136:135028

TITLE: Carnosine cyclodextrin derivatives as antioxidants

INVENTOR(S): Rizzarelli, Enrico; Vecchio, Graziella; La Mendola, Diego

PATENT ASSIGNEE(S): Universita' Degli Studi di Catania, Italy

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1176154	A1	20020130	EP 2001-117259	20010717
EP 1176154	B1	20050629		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

IT 2000MI1696	A1	20020125	IT 2000-MI1696	20000725
IT 1318640	B1	20030827		
AT 298767	T	20050715	AT 2001-117259	20010717
ES 2243368	T3	20051201	ES 2001-117259	20010717

## PRIORITY APPLN. INFO.:

IT 2000-MI1696	A	20000725
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AB Compds. obtained by functionalizing  $\beta$ -cyclodextrin at the 3- or 6-positions with carnosine ( $\beta$ -alanylhistidine) have marked antioxidant (radical scavenger) activity, in particular, anticataract activity. E.g., I was prepared

IT 393100-96-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

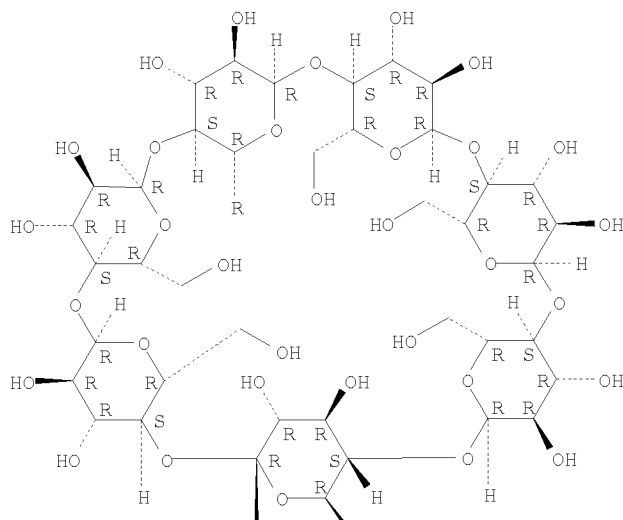
(carnosine cyclodextrin derivs. as antioxidants)

RN 393100-96-4 CAPLUS

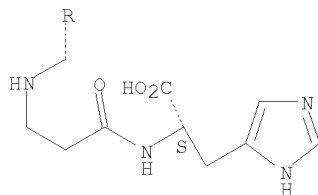
CN L-Histidine, N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- $\beta$ -alanyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:843415 CAPLUS

DOCUMENT NUMBER: 136:354915

TITLE: A method for highly efficient chemiluminescence of imidazopyrazinone in water

AUTHOR(S): Teranishi, K.

CORPORATE SOURCE: Faculty of Bioresources, Mie University, Mie, 514-8507, Japan

SOURCE: Bioluminescence & Chemiluminescence, Proceedings of the International Symposium, 11th, Pacific Grove, CA, United States, Sept. 6-10, 2000 (2001), Meeting Date 2000, 247-250. Editor(s): Case, James F. World Scientific Publishing Co. Pte. Ltd.: Singapore, Singapore.  
CODEN: 69CAFI

DOCUMENT TYPE: Conference

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:354915

AB The chemiluminescence of 2-methyl-6-(p-methoxyphenyl)imidazo[1,2-a]pyrazin-3(7H)-one (MCLA) covalently bound to a single cyclodextrin mol. was effectively enhanced in an aqueous solvent. To study the influence of distance between MCLA and the cyclodextrins, glycine spacers were introduced between MCLA and the cyclodextrins. The chemiluminescence efficiency of the oxygen-induced chemiluminescence in phosphate buffer was significantly dependent on the kind of bound cyclodextrin, the binding site of chromophore and cyclodextrin, and the length of spacer between the chromophore and cyclodextrin. The light-emitting efficiency of the cyclodextrin-bound MCLA compound in which  $\gamma$ -cyclodextrin was covalently attached with a short spacer exhibited high enhancement. This study showed that the strategy involving covalently attaching a light-producing chromophore onto a cyclodextrin for the enhancement of chemiluminescence was more efficient than the use of an aqueous solution containing very large amts. of cyclodextrin.

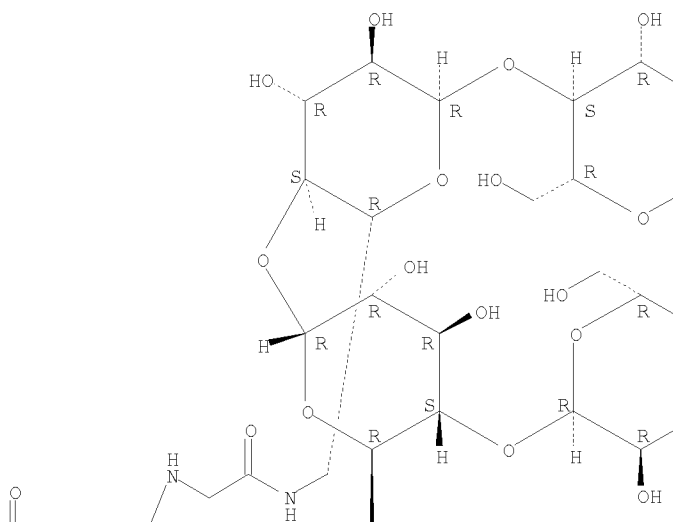
IT 261736-14-5P  
RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(enhanced oxygen-induced chemiluminescence of MCLA covalently bound to cyclodextrins)

RN 261736-14-5 CAPLUS

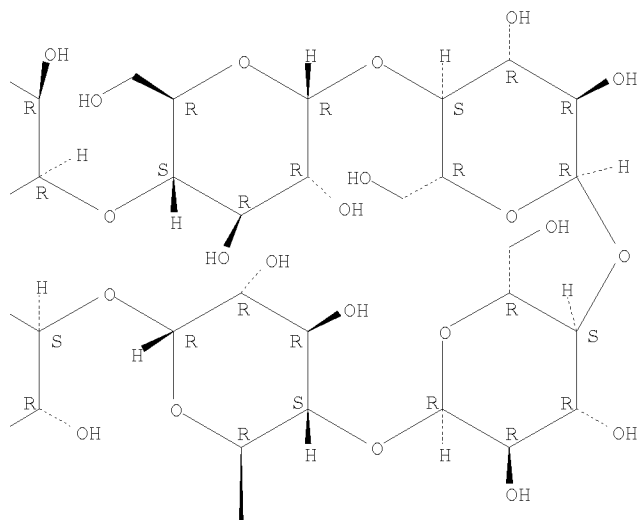
CN  $\gamma$ -Cyclodextrin, 6A-deoxy-6A-[[[N-[3-[3,7-dihydro-6-(4-methoxyphenyl)-3-oxoimidazo[1,2-a]pyrazin-2-yl]-1-oxopropyl]glycyl]glycyl]amino]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

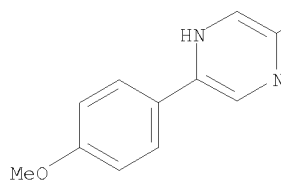
PAGE 1-B



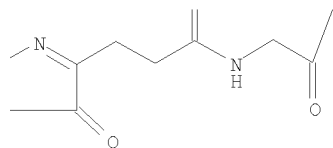
PAGE 1-C



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PAGE 2-B



PAGE 2-C



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2001:615116 CAPLUS  
 DOCUMENT NUMBER: 135:344649  
 TITLE: Synthesis and binding properties of cyclodextrin trimers  
 AUTHOR(S): Leung, D. K.; Atkins, J. H.; Breslow, R.  
 CORPORATE SOURCE: Department of Chemistry, Columbia University, New York, NY, 10027, USA  
 SOURCE: Tetrahedron Letters (2001), 42(36), 6255-6258  
 CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 135:344649

AB A series of cyclodextrin trimers and dimers were prepared and examined as binders for appropriate trimeric and dimeric amino acid amides. Tritopic binding was stronger than ditopic binding, although the free energies were not strictly additive. Such trimers are attractive prospects for the binding of polypeptides and proteins.

IT **371162-07-1P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and binding properties of cyclodextrin trimers  
 with trimeric and dimeric amino acid amides)

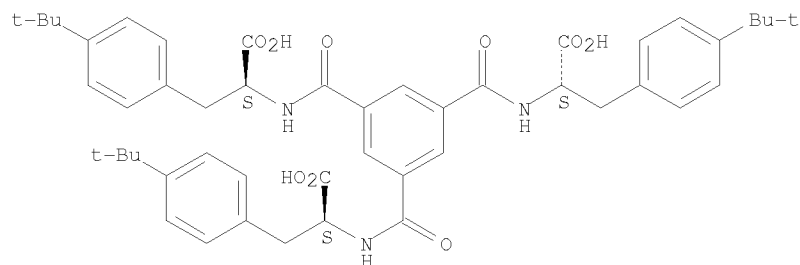
RN 371162-07-1 CAPLUS

CN L-Phenylalanine, N,N',N''-(1,3,5-benzenetriyltricarboxyl)tris[4-(1,1-dimethylethyl)-, compd. with 6A,6'A,6''A-[nitrilotris[(1-oxo-2,1-ethanediyl)imino]]tris[6A-deoxy- $\beta$ -cyclodextrin] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 371161-92-1  
 CMF C48 H57 N3 O9

Absolute stereochemistry.



CM 2

CRN 371161-86-3  
 CMF C132 H216 N4 O105

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT **371161-86-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis and binding properties of cyclodextrin trimers  
 with trimeric and dimeric amino acid amides)

RN 371161-86-3 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6'A,6''A-[nitrilotris[(1-oxo-2,1-ethanediyl)imino]]tris[6A-deoxy- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:504890 CAPLUS

DOCUMENT NUMBER: 135:137706

TITLE: Cyclodextrin-peptide hybrid (CD-peptide) 1  
 synthesis and properties of ( $\alpha$ -helix peptides  
 bearing  $\gamma$ - cyclodextrin and pyrene in  
 their side chains

AUTHOR(S): Hossain, M. A.; Matsumura, S.; Kanai, T.; Hamasaki,  
 K.; Mihara, H.; Ueno, A.

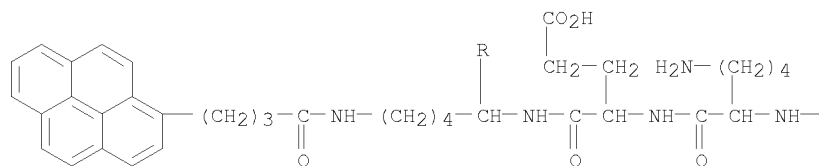
CORPORATE SOURCE: Department of Bioengineering, Graduate School of  
 Bioscience and Biotechnology, Tokyo Institute of  
 Technology, Yokohama, 226-8501, Japan

SOURCE: Cyclodextrin: From Basic Research to Market,  
 International Cyclodextrin Symposium, 10th, Ann Arbor,

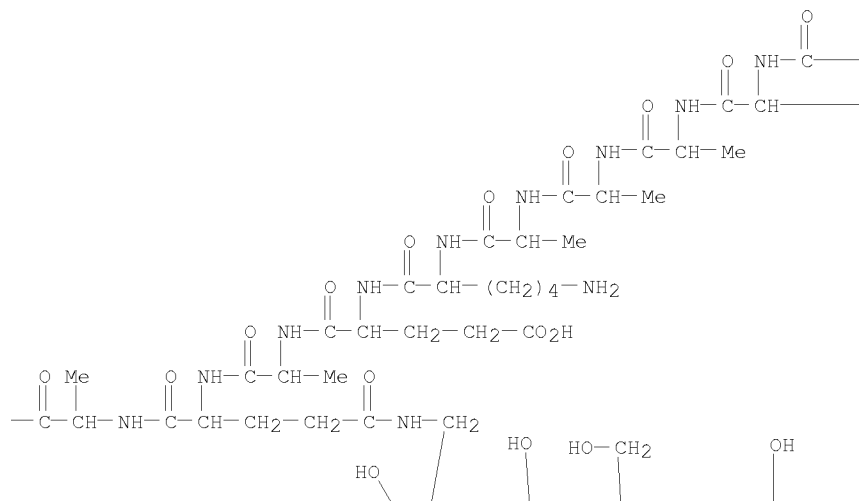
AB A symposium report. Three cyclodextrin-peptide hybrids (CD-peptides) bearing one or two pyrene units in the side chains have been prepared as novel external stimulant mol.-responsive devices. These CD-peptides exhibited concentration dependency in the excimer emission as a result of dimerization of the CD-peptides. The intensity of pyrene excimer emission decreased whereas that of monomer emission increased upon addition of guest mols. This result suggests that dimer CD-peptides dissociated to the monomer CD-peptides in order to accommodate a guest mol. into the CD cavity. CD-peptides bind structurally similar steroid compds. with remarkable discrimination.

RN 270079-04-4 CAPLUS

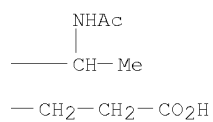
PAGE 1-A



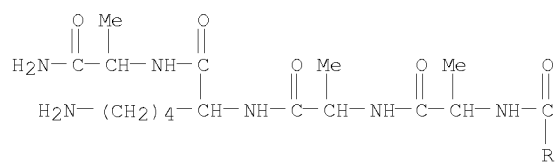
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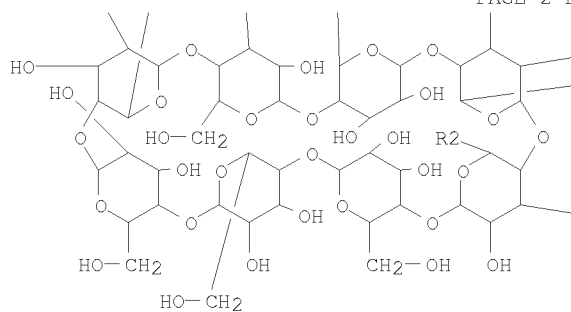
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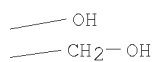
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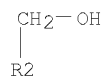
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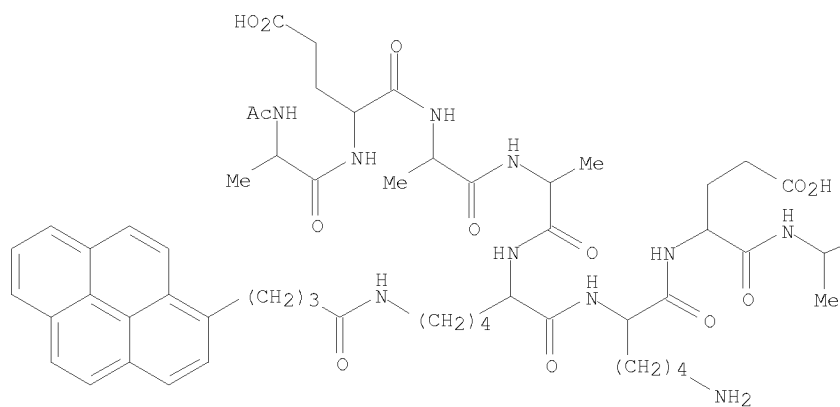


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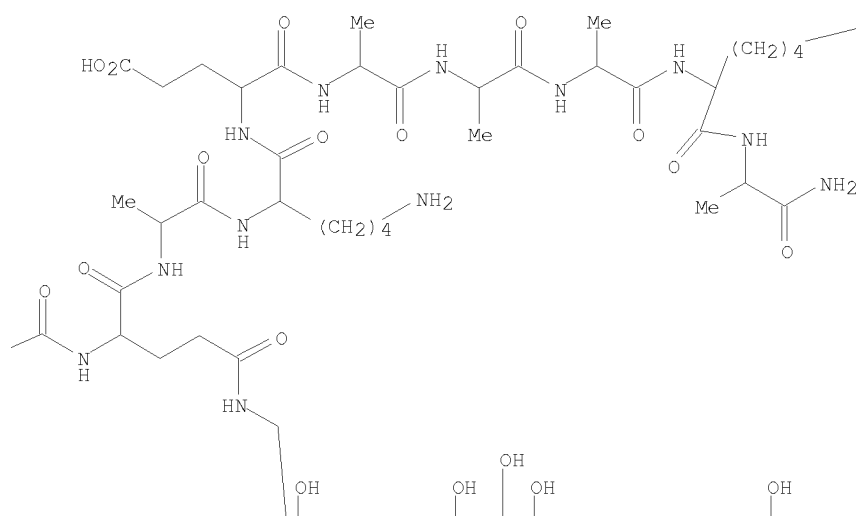


RN 296271-34-6 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

PAGE 1-A



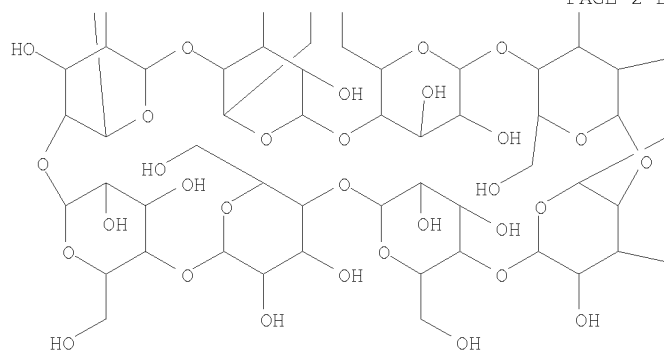
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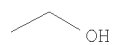
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PAGE 2-C



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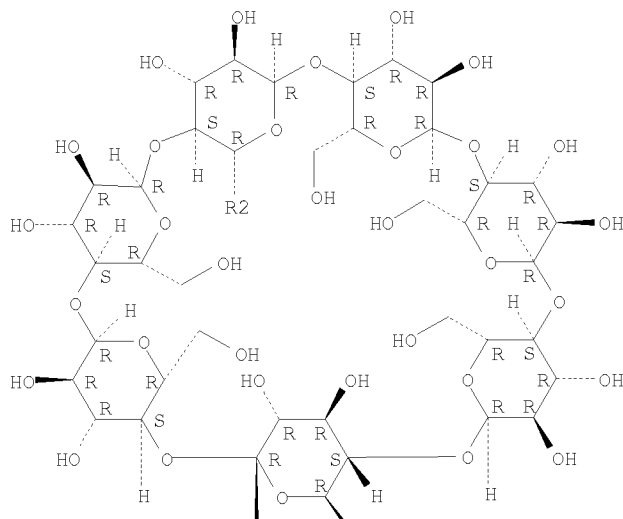
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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

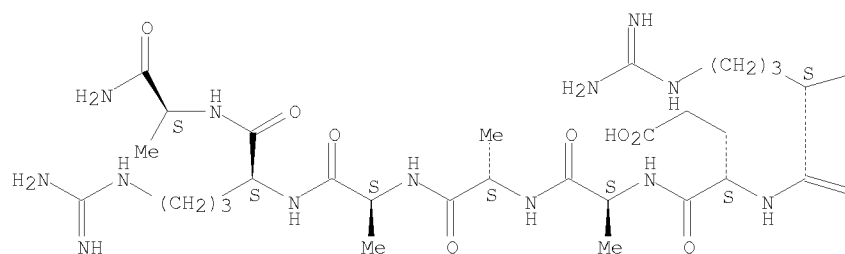
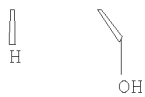
L8 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2001:504885 CAPLUS  
 DOCUMENT NUMBER: 135:137705  
 TITLE: Cyclodextrin peptide hybrid (CD-peptide) 2  
 photoresponsive  $\alpha$ -helix peptide bearing an  
 azobenzene and a  $\beta$ - cyclodextrin or a  
 $\gamma$ - cyclodextrin in their side chain  
 AUTHOR(S): Shimizu, T.; Hamasaki, K.; Mihara, H.; Ueno, A.  
 CORPORATE SOURCE: Department of Bioengineering, Graduate School of  
 Bioscience and Biotechnology, Tokyo Institute of  
 Technology, Yokohama, 226-8501, Japan  
 SOURCE: Cyclodextrin: From Basic Research to Market,  
 International Cyclodextrin Symposium, 10th, Ann Arbor,  
 MI, United States, May 21-24, 2000 (2000), 158-161.  
 Wacker Biochem Corp.: Adrian, Mich.  
 CODEN: 69BFYD  
 DOCUMENT TYPE: Conference; (computer optical disk)  
 LANGUAGE: English  
 AB A symposium report. Cyclodextrin-peptide hybrids (CD-peptide)  
 bearing an azobenzene and a  $\beta$ -CD or a  $\gamma$ -CD groups have been  
 prepared CD spectroscopy revealed that the CD-peptide bearing  $\gamma$ -CD  
 increased the  $\alpha$ -helix content associated with photoisomerization from  
 trans to cis form of the azobenzene unit. While guest binding did not  
 affect the  $\alpha$ -helix content of the CD-peptides, the binding affinity  
 for the guest mol. diminished remarkably by the UV irradiation  
 IT 352031-34-6 352031-35-7 352031-36-8  
352031-37-9  
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,  
 nonpreparative)  
 (binding of hydoexocholic acid by a helical peptide containing  
cyclodextrin and azobenzene groups on the side chain)  
 RN 352031-34-6 CAPLUS  
 CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1E)-  
 phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide (1:1) (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 352031-30-2  
 CMF C128 H203 N31 O60

Absolute stereochemistry.  
 Double bond geometry as shown.

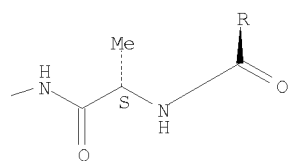
PAGE 1-A



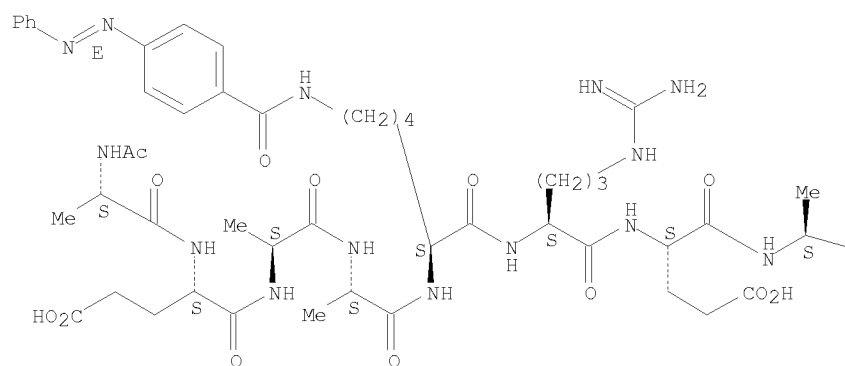
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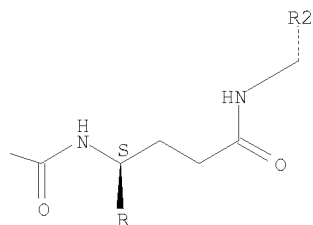


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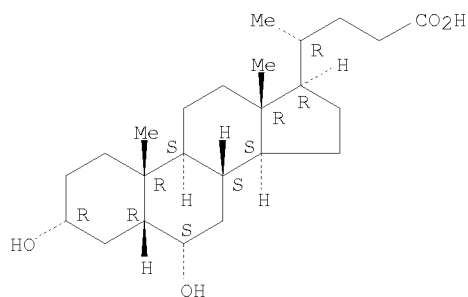


CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



RN 352031-35-7 CAPLUS

CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-  
 phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide (1:1) (9CI)  
 (CA INDEX NAME)

CM 1

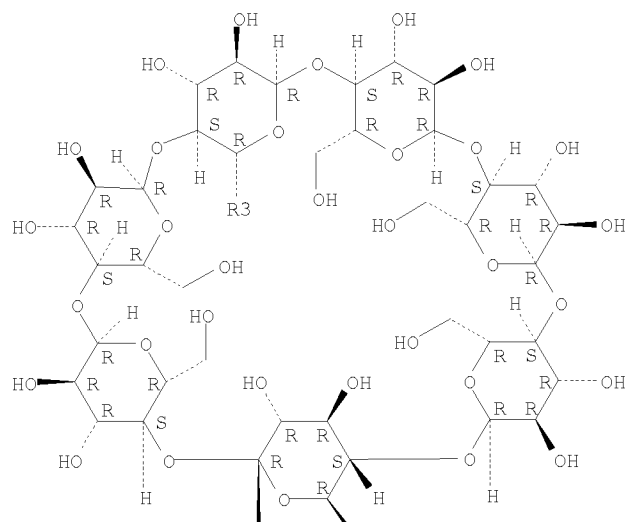
CRN 352031-32-4

CMF C128 H203 N31 O60

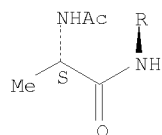
Absolute stereochemistry.

Double bond geometry as shown.

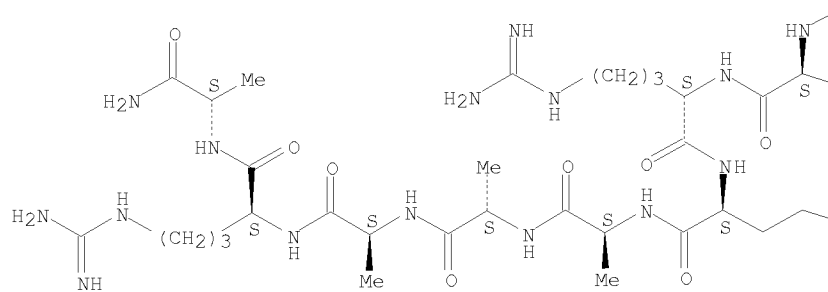
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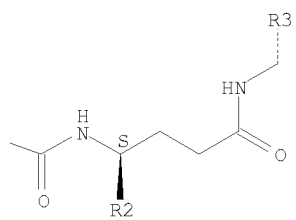
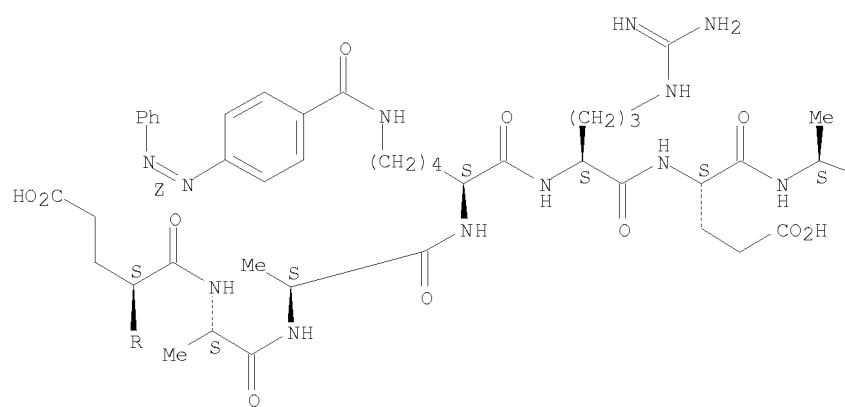
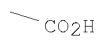
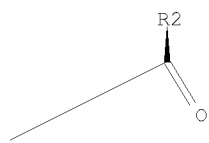


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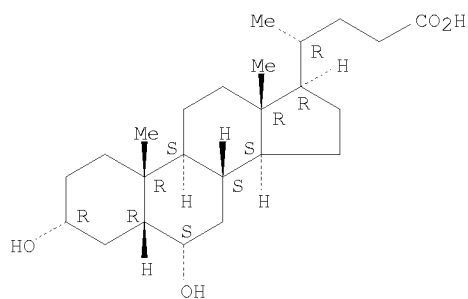
CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.

10576346



RN 352031-36-8 CAPLUS

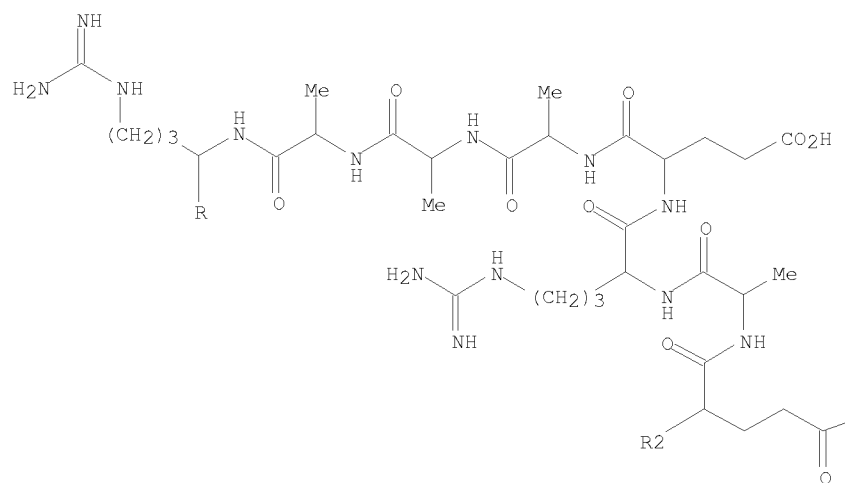
CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide (1:1)  
(9CI) (CA INDEX NAME)

CM 1

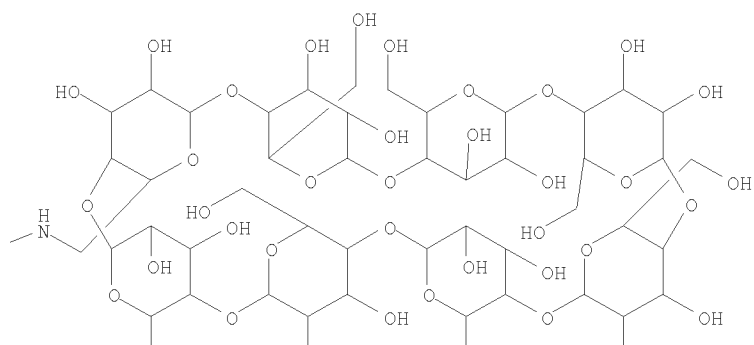
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CMF C134 H213 N31 O65

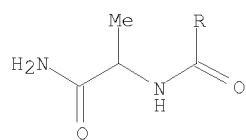
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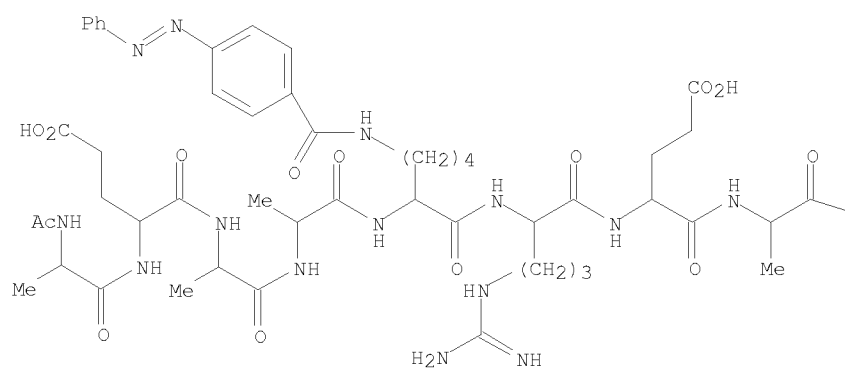
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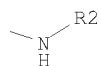


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PAGE 3-A



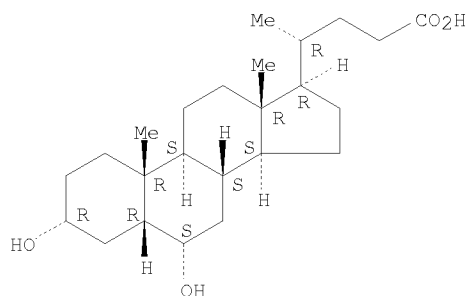


CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



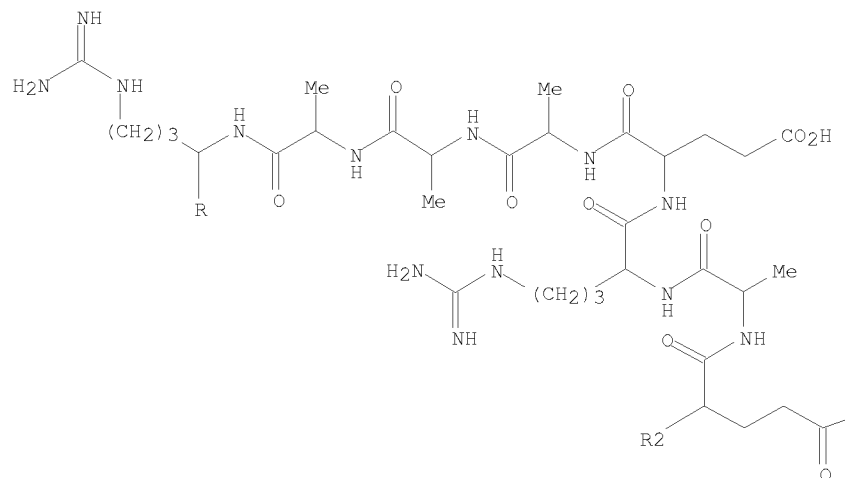
RN 352031-37-9 CAPLUS

CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-  
 phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-  
 deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-  
 $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-arginyl-L-alaninamide (1:1)  
 (9CI) (CA INDEX NAME)

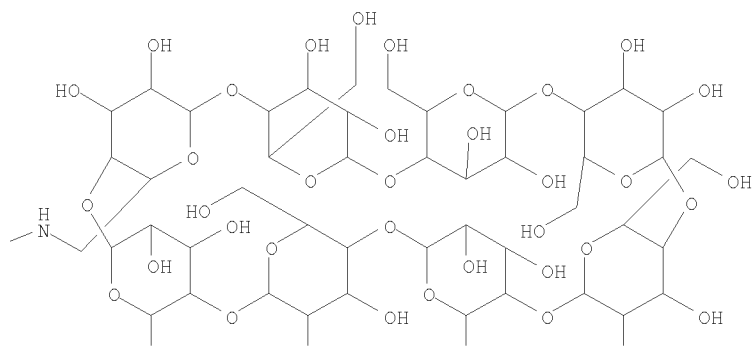
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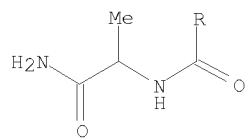
CMF C134 H213 N31 O65



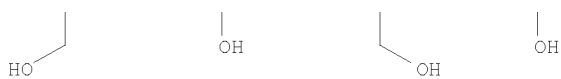
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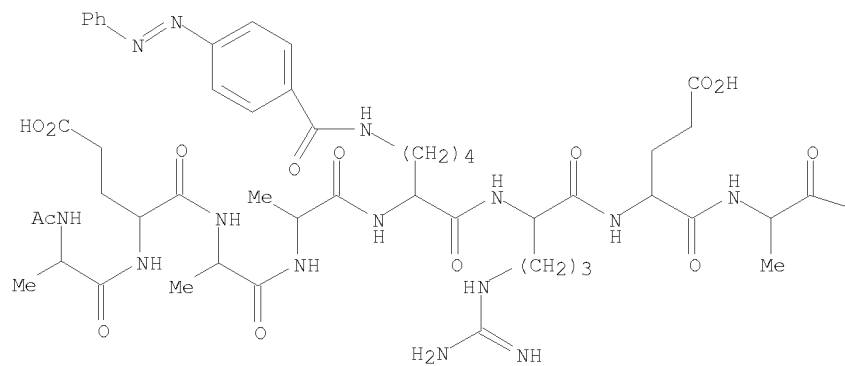
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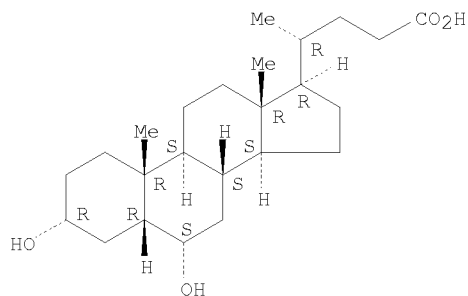


CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



IT **352031-30-2P** **352031-31-3P** **352031-32-4P**  
**352031-33-5P**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN  
 (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (preparation, photoisomerization and the helical content of a peptide  
 bearing cyclodextrin and azobenzene groups on the side chain)

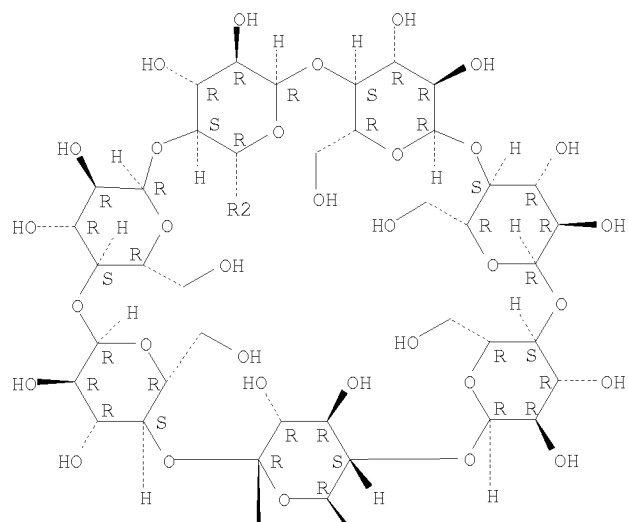
RN 352031-30-2 CAPLUS

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 [4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-  
 N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-  
 $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX  
 NAME)

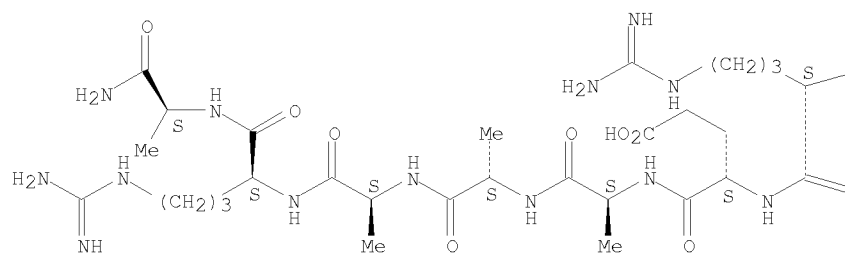
Absolute stereochemistry.

Double bond geometry as shown.

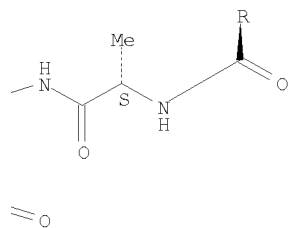
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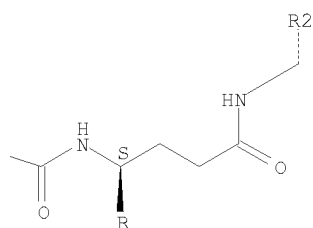
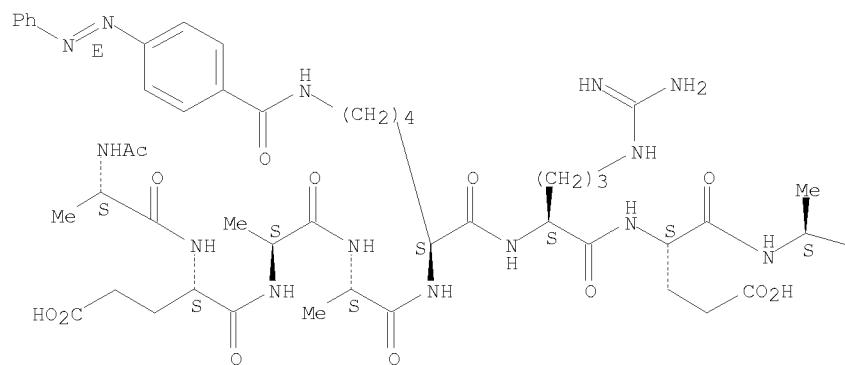


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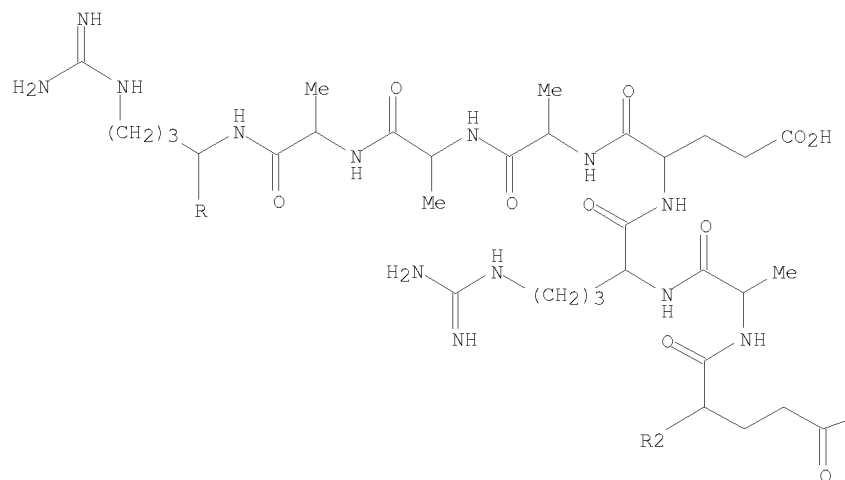
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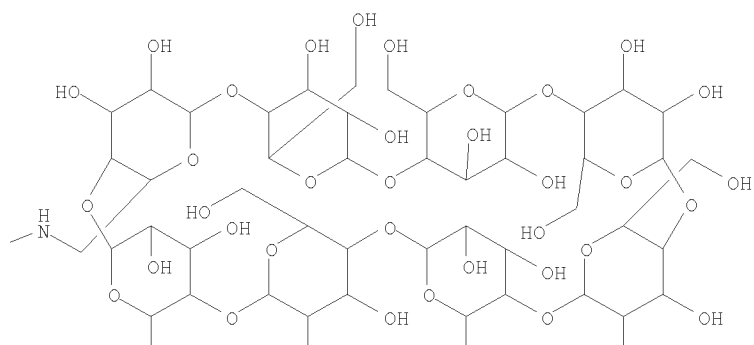


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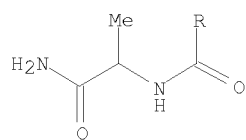
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1E)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)



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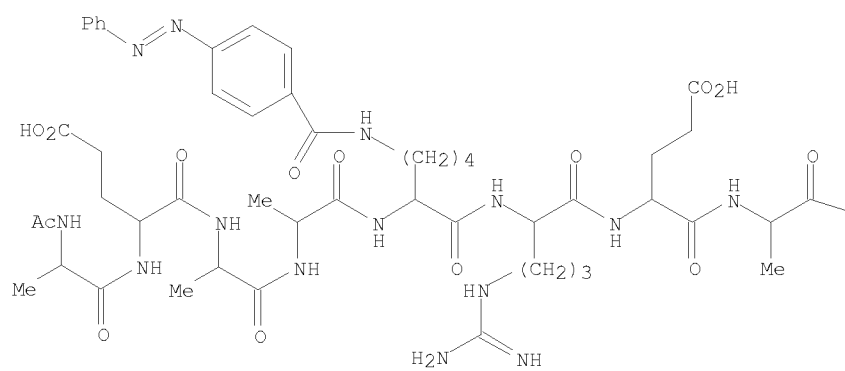
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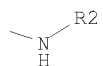


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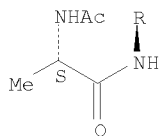
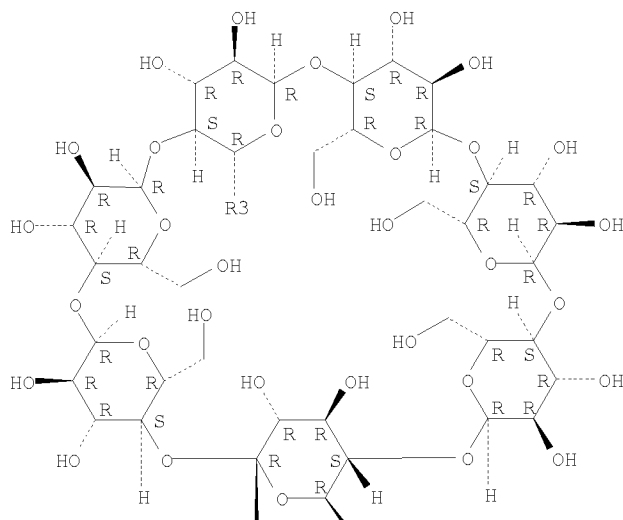


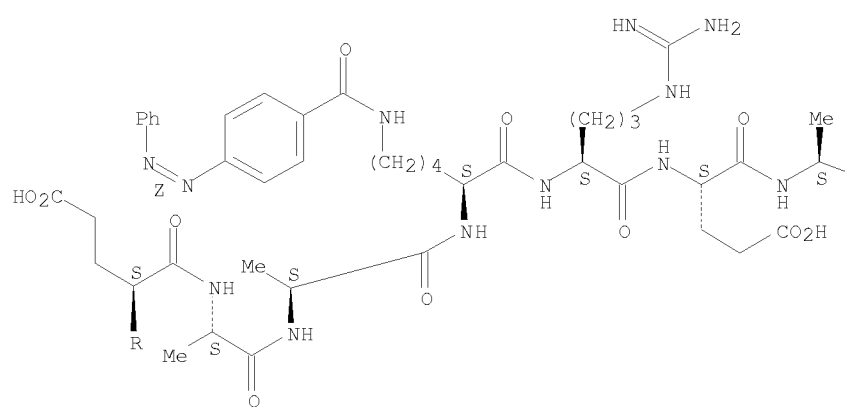
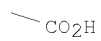
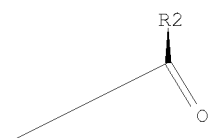
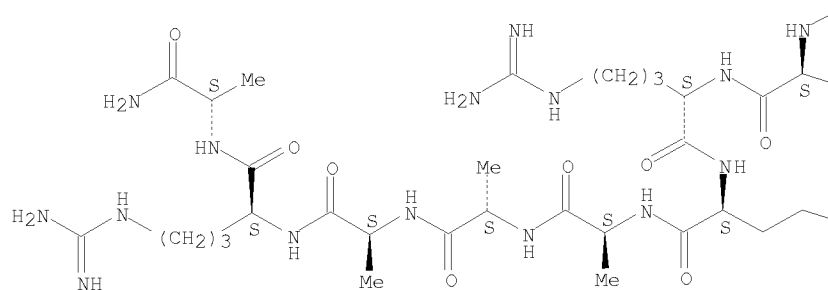


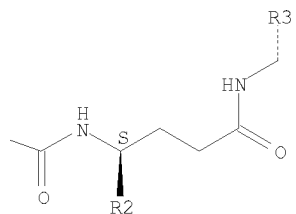
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CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

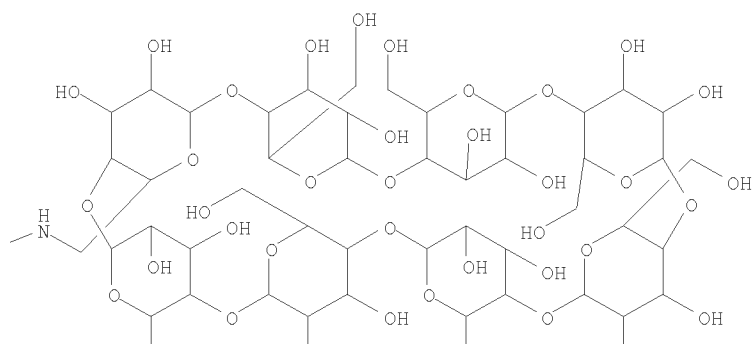
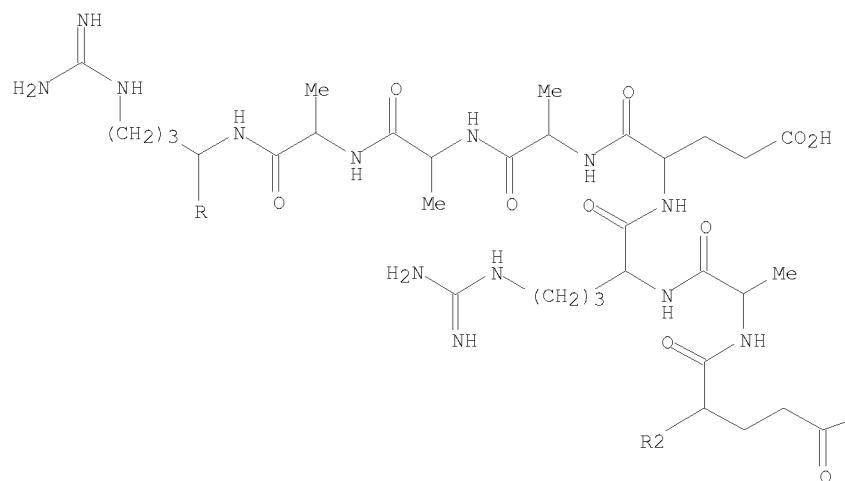




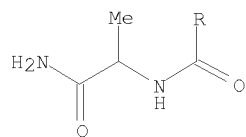


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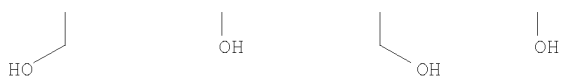
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-[(1Z)-phenylazo]benzoyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)



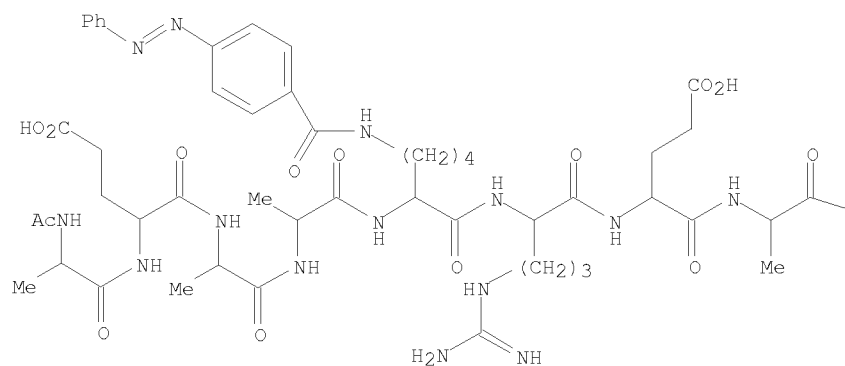
PAGE 2-A



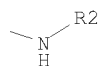
PAGE 2-B



PAGE 3-A



PAGE 3-B



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:489986 CAPLUS

DOCUMENT NUMBER: 135:189416

TITLE: Guest-induced diminishment in fluorescence quenching and molecule sensing ability of a novel cyclodextrin-peptide conjugate

AUTHOR(S): Hossain, Mohammed Akhter; Hamasaki, Keita; Takahashi, Keiko; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Midori, Yokohama, 226-8501, Japan

SOURCE: Journal of the American Chemical Society (2001),

123(30), 7435-7436  
 CODEN: JACSAT; ISSN: 0002-7863  
 American Chemical Society

PUBLISHER:  
 DOCUMENT TYPE:  
 LANGUAGE:

Journal  
 English

AB The authors have synthesized a novel CD-peptide hybrid (I) that has two different photoreactive moieties, pyrene (electron donor) and nitrobenzene (NB: electron acceptor) on the peptide scaffold. The authors report here, for the first time, how it works as a chemosensor when both fluorophore (pyrene) and quencher (NB) are present in a cyclodextrin (CD)-conjugated peptide mol. To study the conformational change and mol. sensing ability of I, the authors also have synthesized three reference peptides, which have CD and NB units, pyrene and NB units and only one pyrene unit in the side chain of the peptides. The binding and fluorescence properties of I and cholic acid and its derivs. were studied and discussed.

IT **355126-81-7P 355126-82-8P**

RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

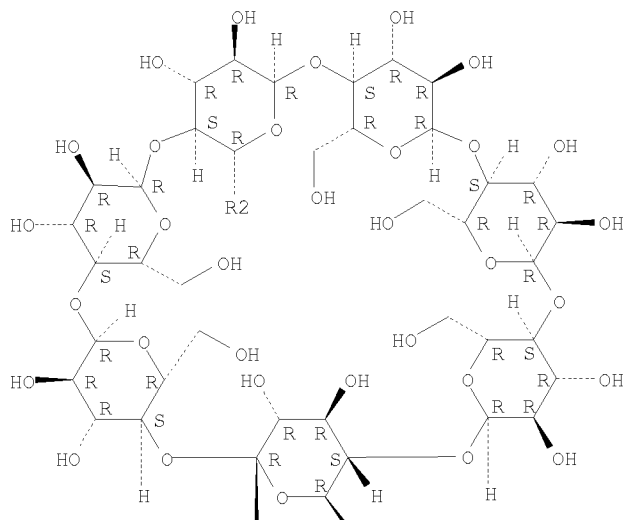
(guest-induced diminishment in fluorescence quenching and mol. sensing ability of a novel cyclodextrin-peptide conjugate)

RN 355126-81-7 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-3-(1-pyrenyl)-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

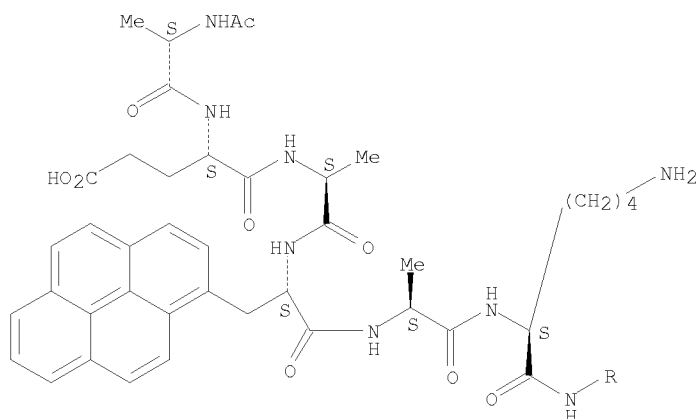
PAGE 1-A



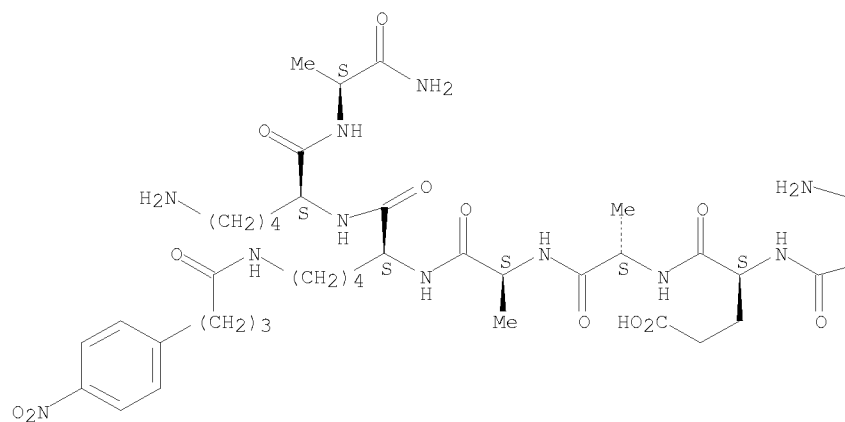
PAGE 2-A



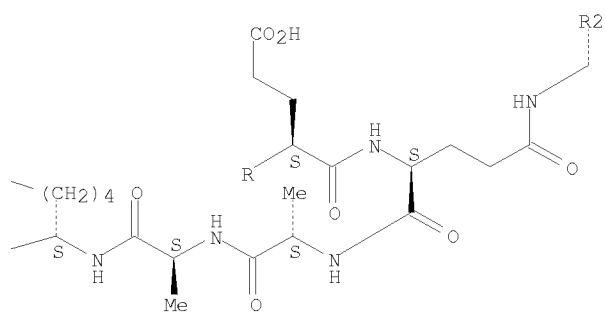
PAGE 3-A



PAGE 4-A



PAGE 4-B

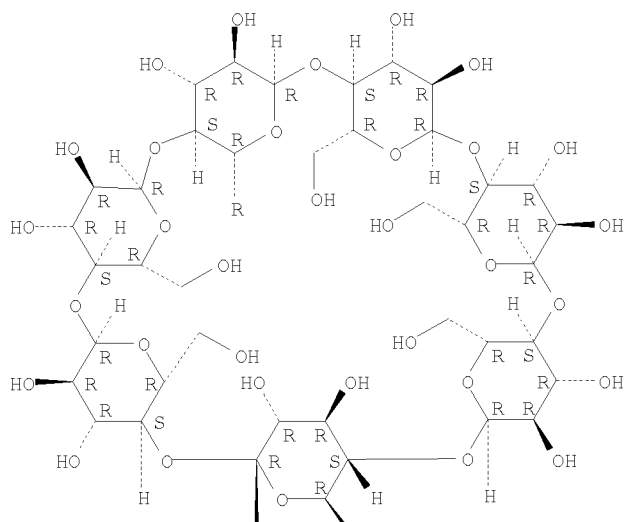


RN 355126-82-8 CAPLUS

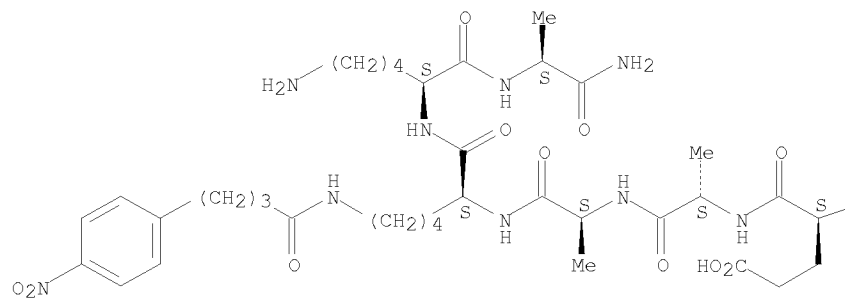
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[4-(4-nitrophenyl)-1-oxobutyl]-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

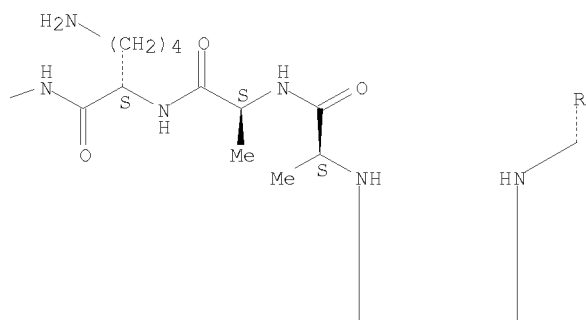
PAGE 1-A



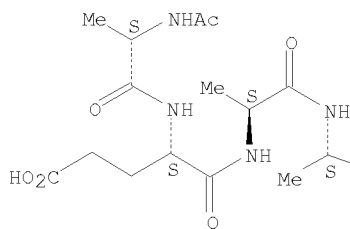
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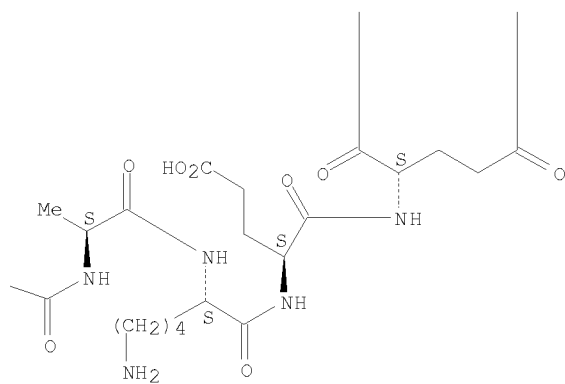
PAGE 2-B



PAGE 3-A



PAGE 3-B



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2001:332832 CAPLUS  
 DOCUMENT NUMBER: 135:116128  
 TITLE: Immobilized fluorescent cyclodextrin on a cellulose membrane as a chemosensor for molecule detection

AUTHOR(S): Tanabe, Tetsuya; Touma, Kazuhiro; Hamasaki, Keita;  
Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering Graduate School of  
Bioscience and Biotechnology, Tokyo Institute of  
Technology, Midori-ku Yokohama, 226-8501, Japan

SOURCE: Analytical Chemistry (2001), 73(13), 3126-3130  
CODEN: ANCHAM; ISSN: 0003-2700

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Dansylglycine-modified cyclodextrin (DnsC4- $\beta$ -CD) was prepared  
as a fluorescent host that is capable of being immobilized on a cellulose  
membrane (DnsC4- $\beta$ -CD membrane). DnsC4- $\beta$ -CD immobilized on the  
cellulose membrane decreased its fluorescence intensity with increasing  
concentration of guest mols., indicating that the host changes the location of  
the dansyl group from inside to outside the cyclodextrin cavity  
upon guest accommodation, which is similar to DnsC4- $\beta$ -CD in solution;  
thereby, the DnsC4- $\beta$ -CD membrane is useful as a novel chemosensor for  
detecting mols. This result demonstrates that the cellulose membrane is  
useful as a practical supporting material for various chromophore-modified  
cyclodextrins.

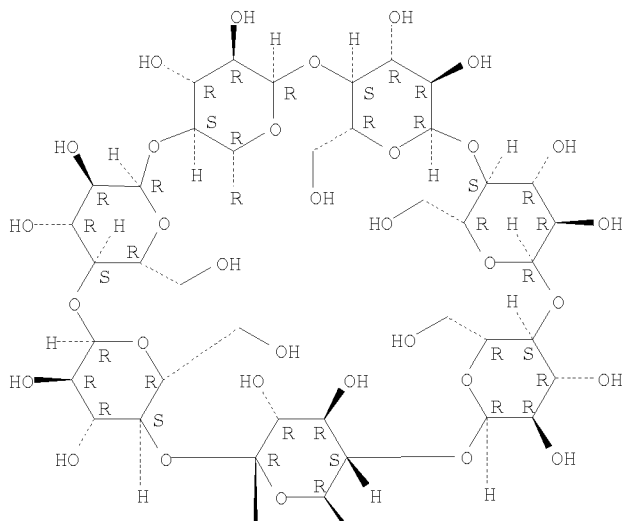
IT 350033-77-1DP, reaction product with cellulose membrane  
RL: ARU (Analytical role, unclassified); DEV (Device component use); SPN  
(Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES  
(Uses)  
(immobilized fluorescent cyclodextrin on a cellulose membrane  
as a chemosensor for mol. detection)

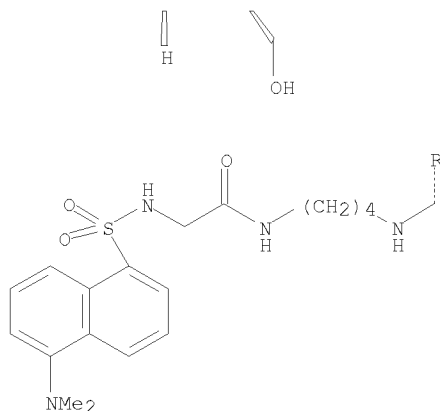
RN 350033-77-1 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[[[[5-(dimethylamino)-1-  
naphthalenyl]sulfonyl]amino]acetyl]amino]butyl]amino]- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:229965 CAPLUS

DOCUMENT NUMBER: 135:19895

TITLE: Formation of superstructure composed of modified **cyclodextrins** as molecular "blocks" in aqueous solution with host-guest complexation. Correlation of chemical structure of modified group with complexation

AUTHOR(S): Takahashi, Keiko; Imotani, Koichi; Kitsuta, Masahiko

CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Tokyo Institute of Polytechnics, Kanagawa, 243-0297, Japan

SOURCE: Polymer Journal (Tokyo, Japan) (2001), 33(3), 242-247  
CODEN: POLJB8; ISSN: 0032-3896

PUBLISHER: Society of Polymer Science, Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:19895

AB N'-tert-butoxycarbonyl monoamino acid-binding  $\beta$ - and  $\alpha$ -**cyclodextrins** (CDs) were prepared by DCC coupling. NMR study suggests some of these novel modified CDs that act as host and guest to prefer "pseudo polymer" formation. The length of an arm between the N'-tert-butoxycarbonyl group and C6 position on the glucose ring was that of -NH-C $\alpha$ -CO-NH-. Modified  $\beta$ -CDs having longer arm form intramol. rather than intermol. complexes.

IT **342635-78-3P 342635-79-4P 342635-84-1P 342635-86-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

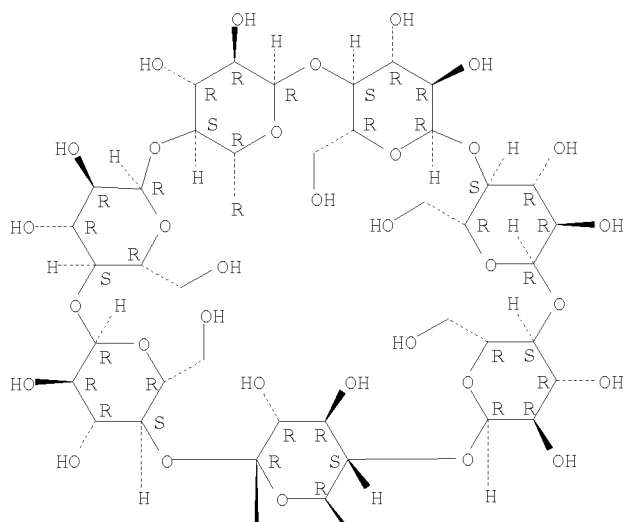
(preparation and host-guest complexation of amino acid-modified **cyclodextrins**)

RN 342635-78-3 CAPLUS

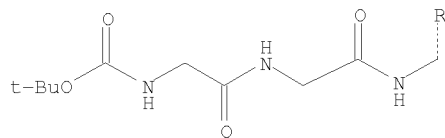
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-[(1,1-dimethylethoxy)carbonyl]glycylglycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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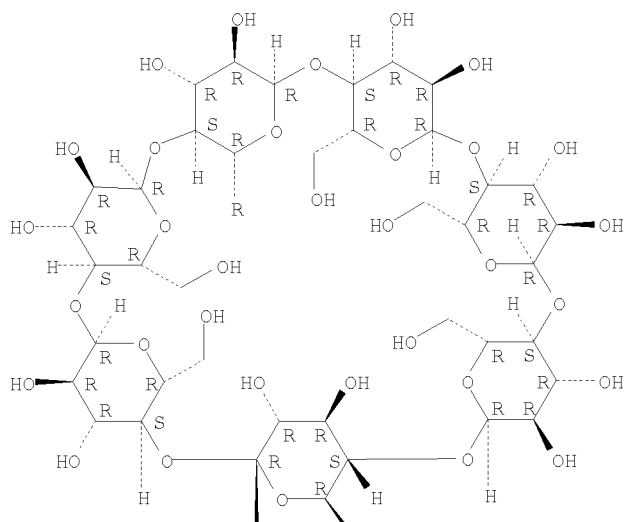


RN 342635-79-4 CAPLUS

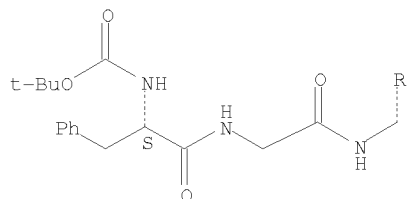
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanylglycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



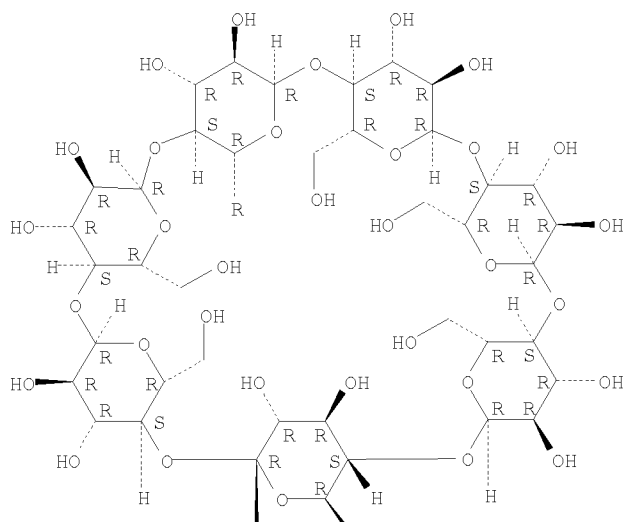
RN 342635-84-1 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[N-[(1,1-dimethylethoxy)carbonyl]glycylglycyl]amino]-, compd. with  $\beta$ -cyclodextrin (1:1) (9CI) (CA INDEX NAME)

CM 1

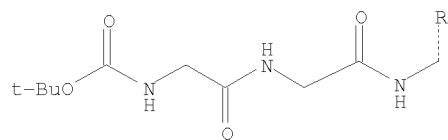
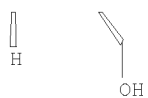
CRN 342635-78-3  
 CMF C51 H85 N3 O38

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

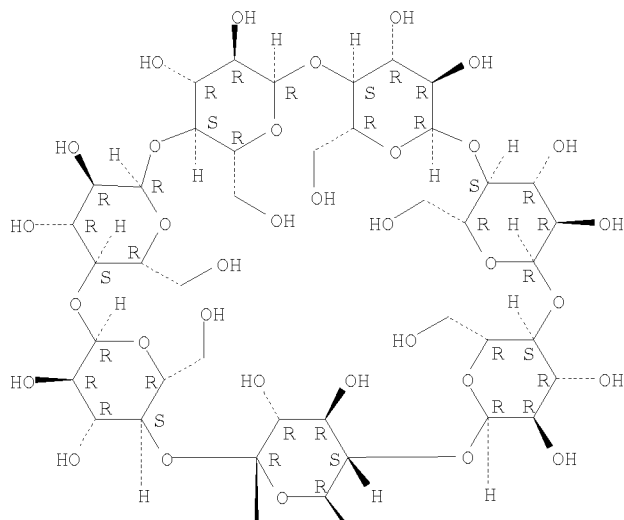


CM 2

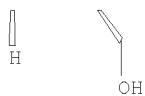
CRN 7585-39-9  
 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



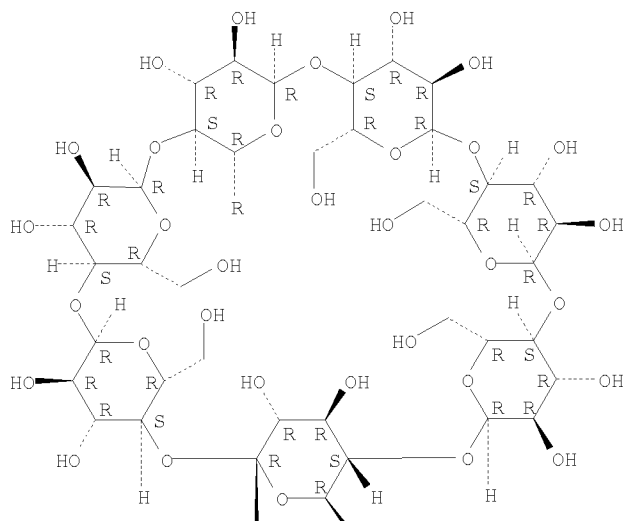
RN 342635-86-3 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanylglycyl]amino]-, compd. with  $\beta$ -cyclodextrin (1:1) (9CI)  
 (CA INDEX NAME)

CM 1

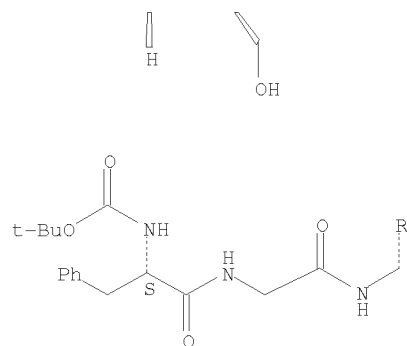
CRN 342635-79-4  
 CMF C58 H91 N3 O38

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

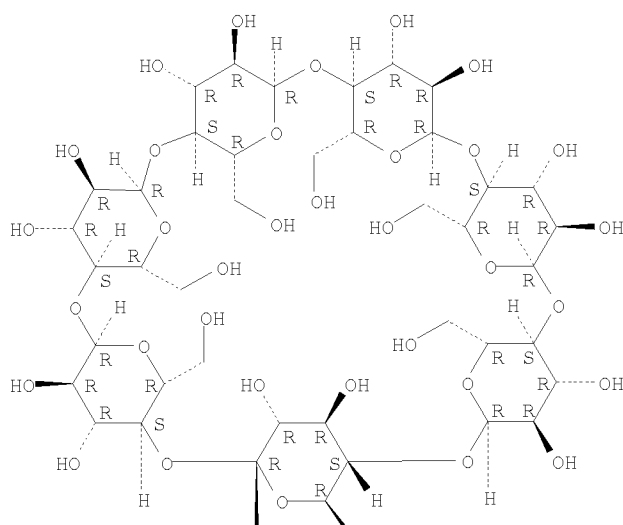


CM 2

CRN 7585-39-9  
CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:184171 CAPLUS

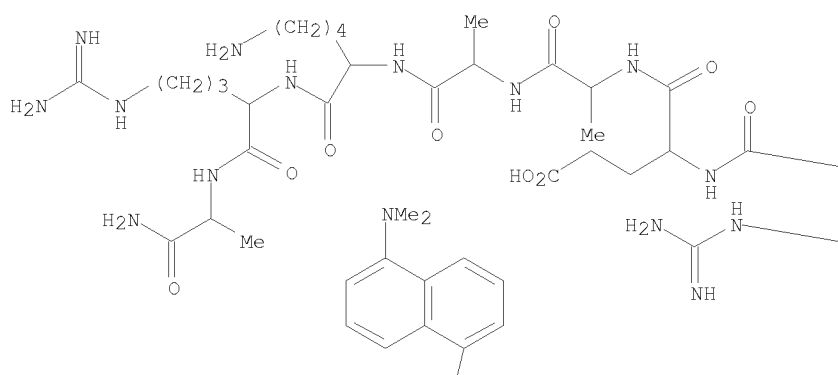
DOCUMENT NUMBER: 134:326761

TITLE: Remarkable stabilization of the  $\alpha$ -helix structure by an intramolecular host-guest bridge in a cyclodextrin-peptide hybrid

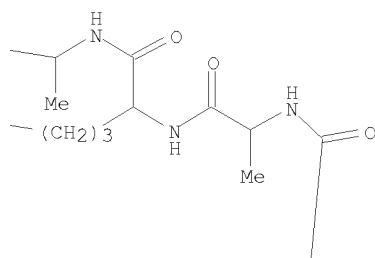
AUTHOR(S): Hamasaki, Keita; Suzuki, Ryosuke; Mihara, Hisakazu;

Ueno, Akihiko  
 CORPORATE SOURCE: Department of Bioengineering, Graduate School of  
 Bioscience and Biotechnology, Tokyo Institute of  
 Technology, Yokohama, 226-8501, Japan  
 SOURCE: Macromolecular Rapid Communications (2001), 22(4),  
 262-265  
 CODEN: MRCOE3; ISSN: 1022-1336  
 PUBLISHER: Wiley-VCH Verlag GmbH  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A cyclodextrin-peptide hybrid (CD-peptide) bearing three  
 substituent units ( $\gamma$ - cyclodextrin, cholic acid, and a  
 dansyl fluorophore) in the side chain has been prepared In this novel  
 CD-peptide, the cholic acid unit acts as an internal guest and forms an  
 intramol. inclusion complex with  $\gamma$ - cyclodextrin in the  
 CD-peptide. This intramol. complex works as a host-guest bridge in the  
 CD-peptide and remarkably stabilizes the  $\alpha$ -helix structure of the  
 CD-peptide.  
 IT 337307-99-0P 337308-00-6P 337308-01-7P  
337308-02-8P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of an intramol. host-guest bridge in a cyclodextrin  
 -peptide hybrid for stabilization of  $\alpha$ -helix structure)  
 RN 337307-99-0 CAPLUS  
 CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-  
 (dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -  
 glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutaminyl-L-  
 alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-  
 arginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 337307-97-8  
 CMF C139 H228 N32 O67 S

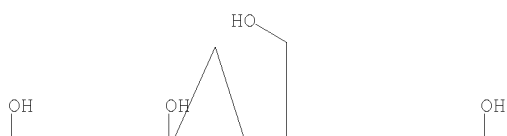
PAGE 1-A



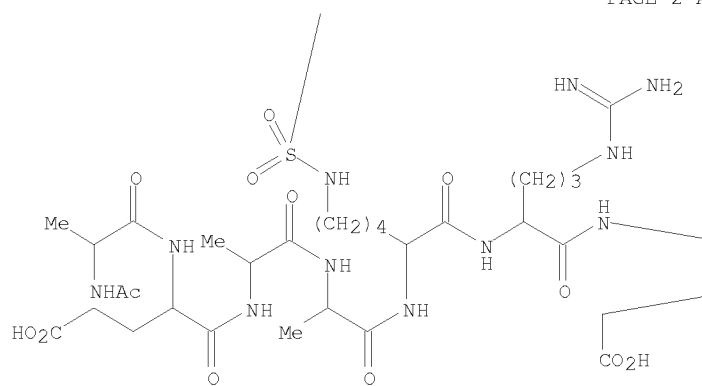
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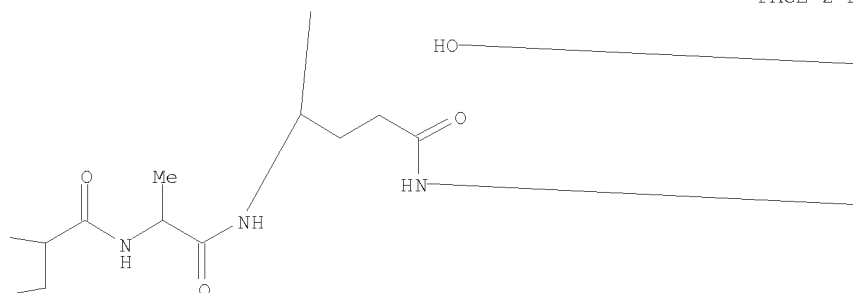
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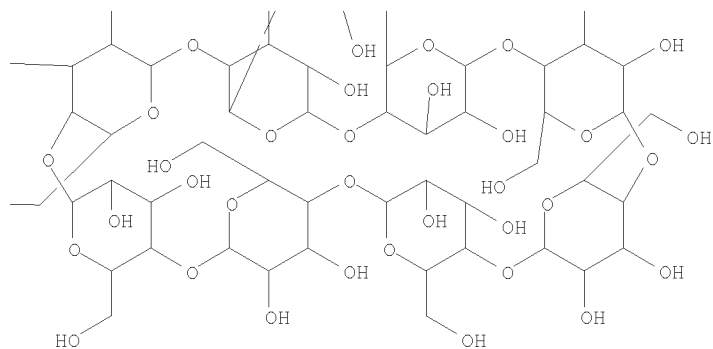
PAGE 2-A



PAGE 2-B



PAGE 2-C

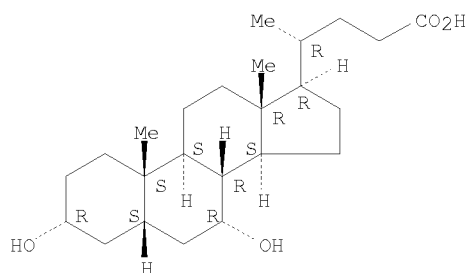


CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 337308-00-6 CAPLUS

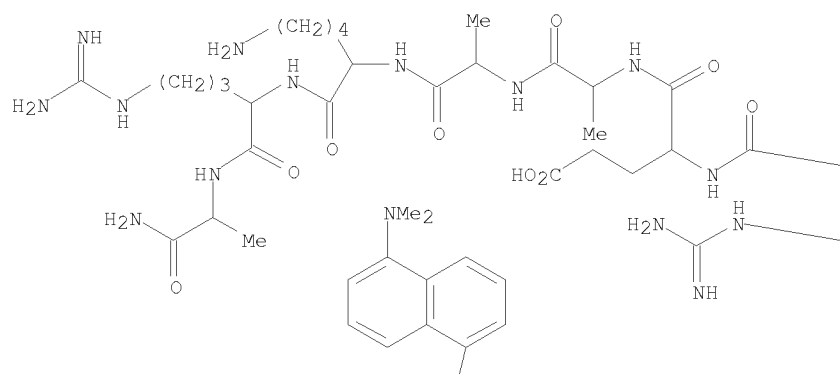
CN Cholan-24-oic acid, 3,12-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,12 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

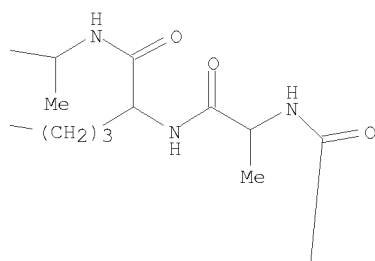
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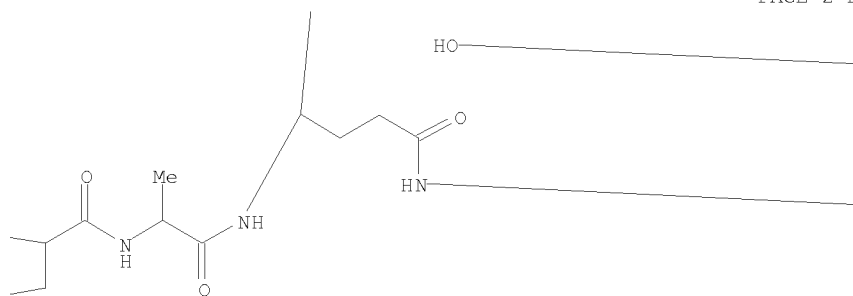
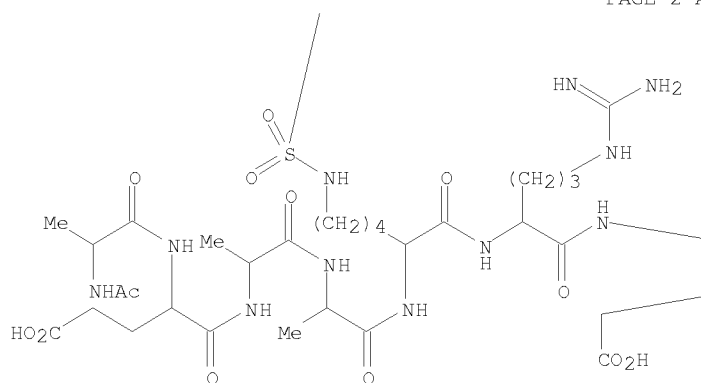
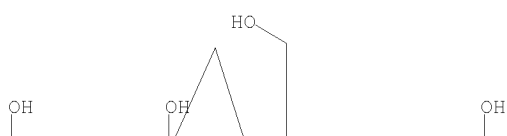
CMF C139 H228 N32 O67 S

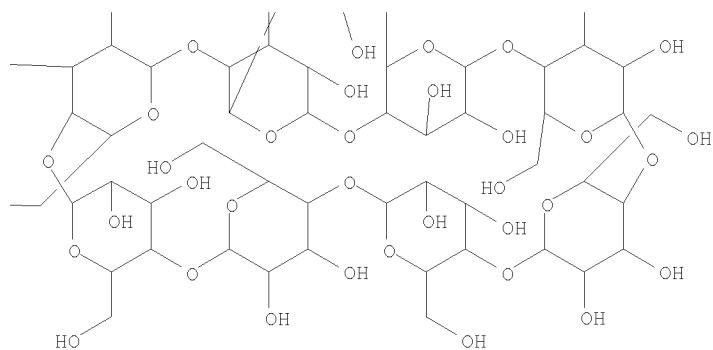
PAGE 1-A



PAGE 1-B





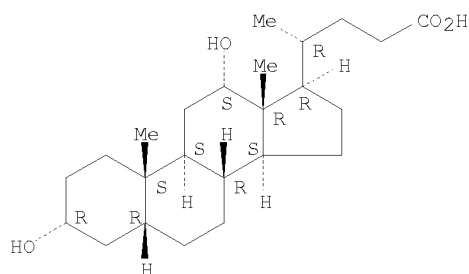


CM 2

CRN 83-44-3

CMF C24 H40 O4

Absolute stereochemistry.



RN 337308-01-7 CAPLUS

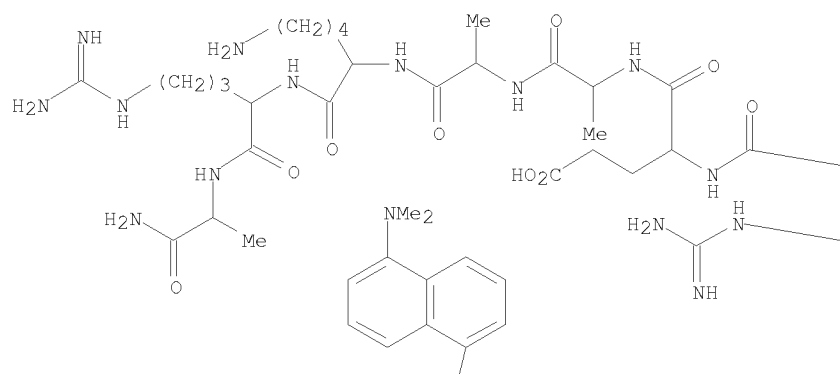
CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

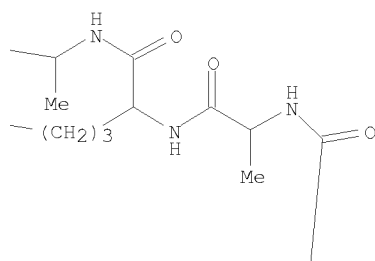
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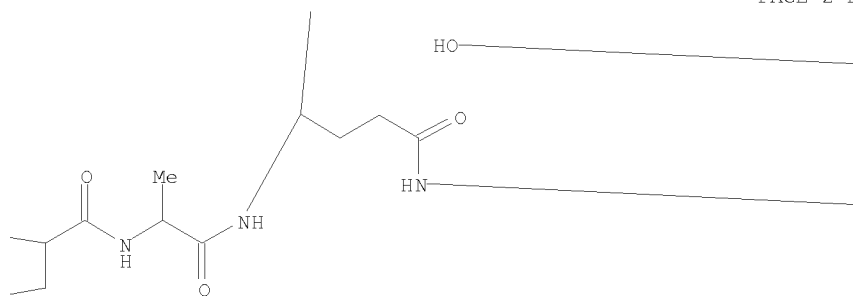
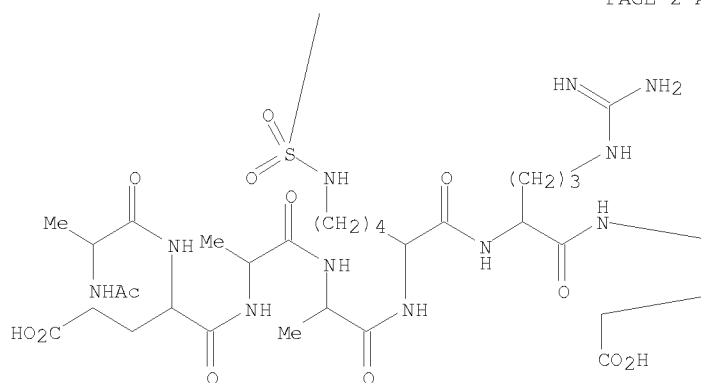
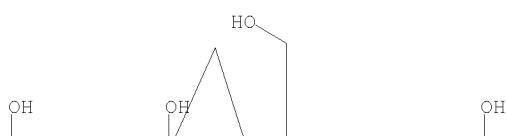
CMF C139 H228 N32 O67 S

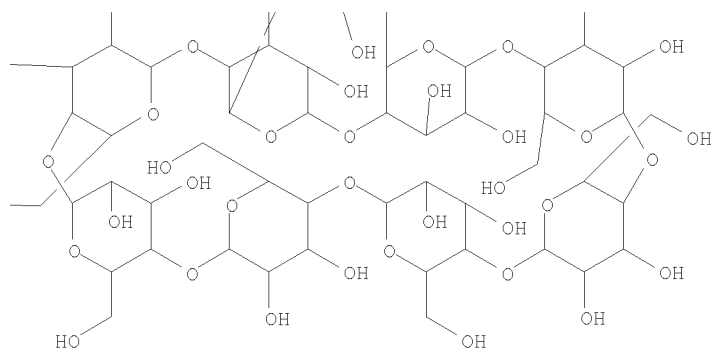
PAGE 1-A



PAGE 1-B





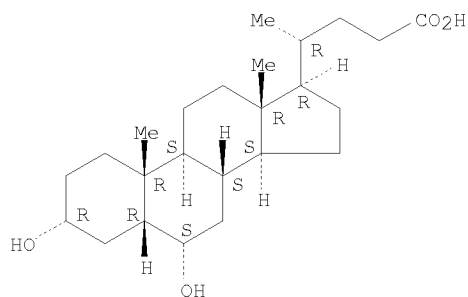


CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



RN 337308-02-8 CAPLUS

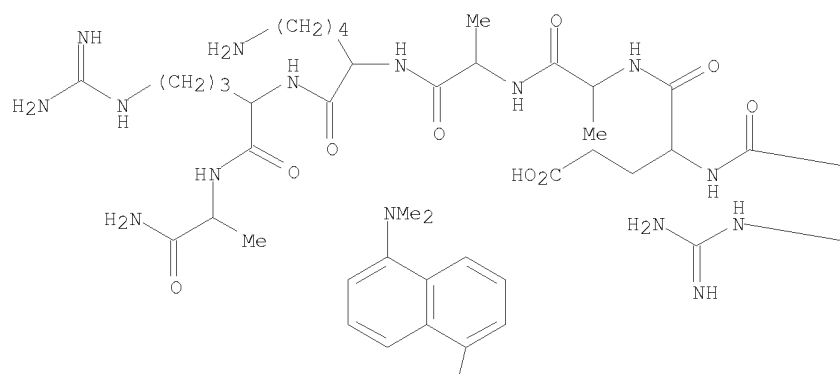
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

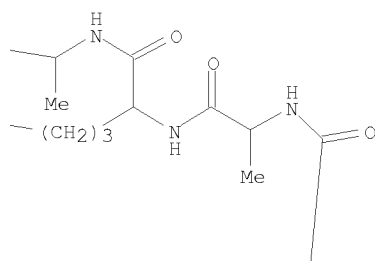
CRN 337307-97-8

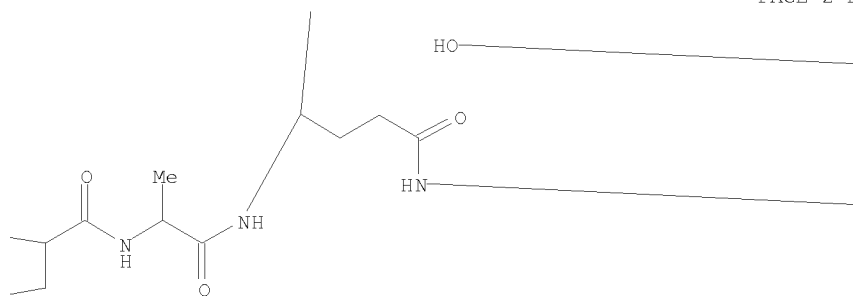
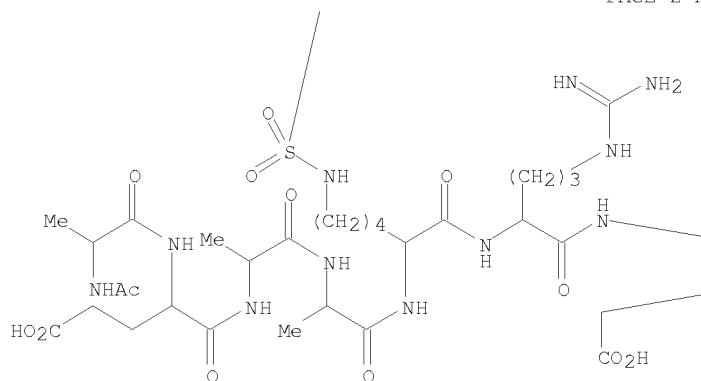
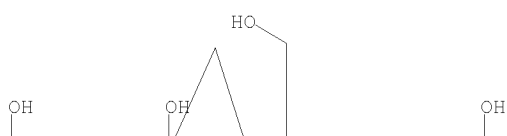
CMF C139 H228 N32 O67 S

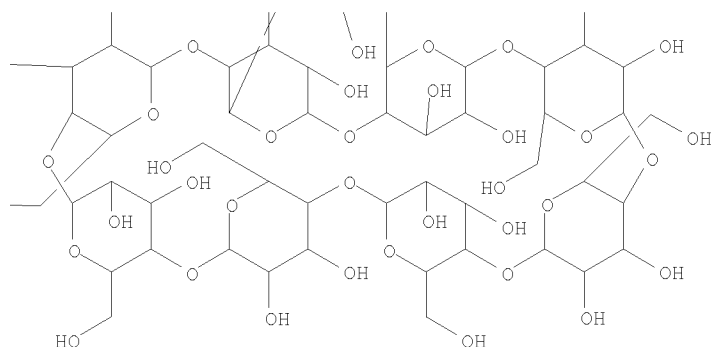
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PAGE 1-B



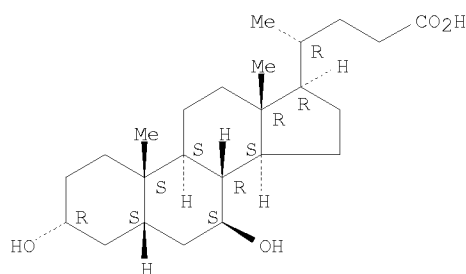




CM 2

CRN 128-13-2  
CMF C24 H40 O4

Absolute stereochemistry.

IT **337307-97-8P**

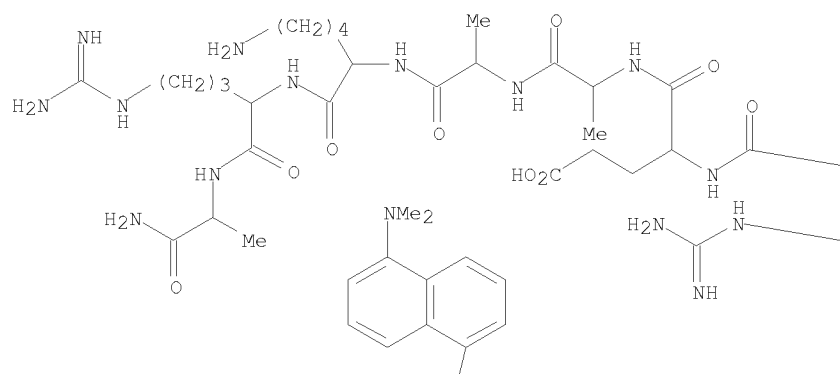
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of an intramol. host-guest bridge in a cyclodextrin-peptide hybrid for stabilization of  $\alpha$ -helix structure)

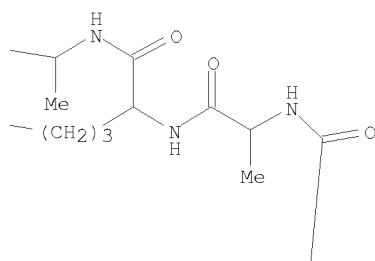
RN 337307-97-8 CAPLUS

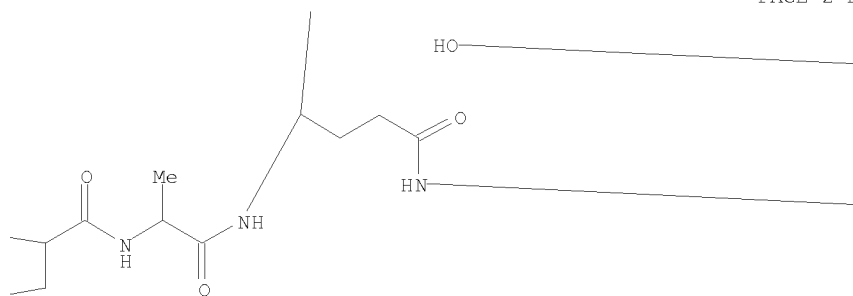
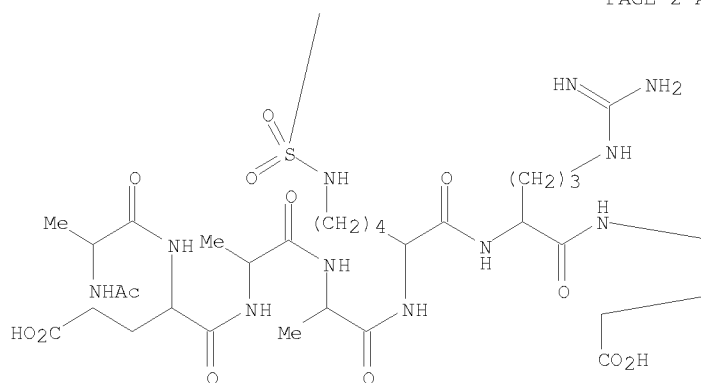
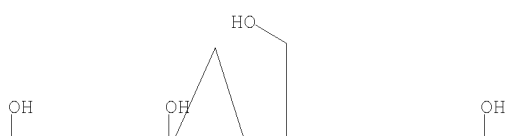
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-arginyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-arginyl- (9CI) (CA INDEX NAME)

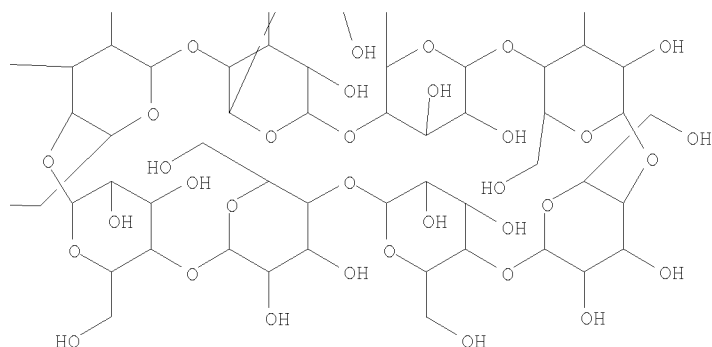
PAGE 1-A



PAGE 1-B







REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:842866 CAPLUS

DOCUMENT NUMBER: 134:193702

TITLE:  $\beta$ - cyclodextrin for presentation of bioactive peptides to molecular recognition

AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Musiol, Hans-Jurgen; Assfalg-Machleidt, Irmgard; Machleidt, Werner; Escricut, Chantal; Fourmy, Daniel; Muller, Gerhard; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried, D-82152, Germany

SOURCE: Peptides: Biology and Chemistry, Proceedings of the Chinese Peptide Symposium, 5th, Lanzhou, China, July 14-17, 1998 (2000), Meeting Date 1998, 202-209. Editor(s): Hu, Xiao-Yu; Wang, Rui; Tam, James P. Kluwer Academic Publishers: Dordrecht, Neth. CODEN: 69AQX6

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report.  $\beta$ - Cyclodextrin/gastrin peptide conjugates were prepared and their binding affinities to the CCK- $\beta$ /gastrin receptor were determined

IT 211360-86-0P 211360-87-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

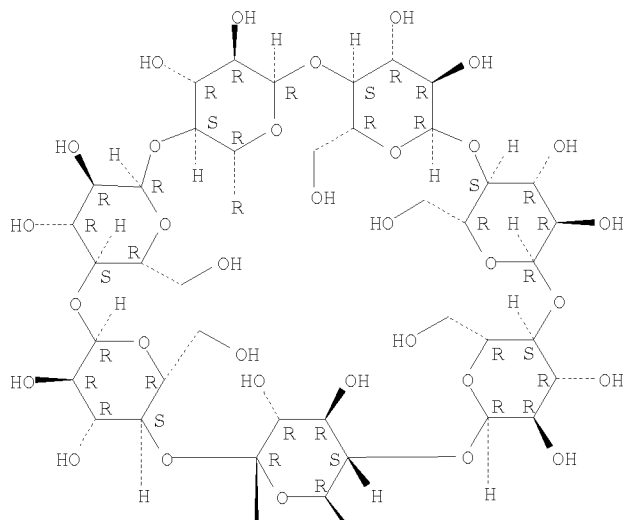
( $\beta$ - cyclodextrin for presentation of bioactive peptides to mol. recognition)

RN 211360-86-0 CAPLUS

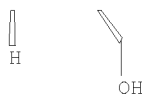
CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

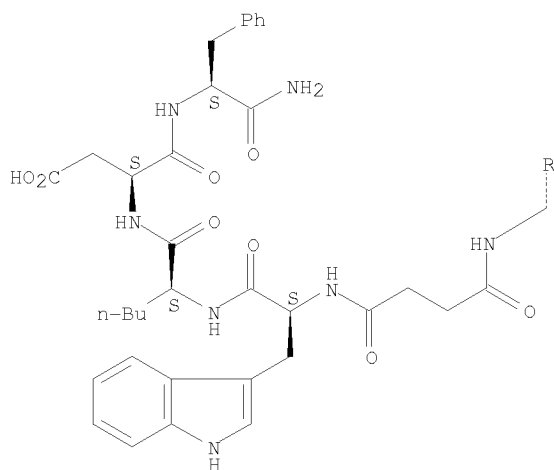
PAGE 1-A



PAGE 2-A



PAGE 3-A

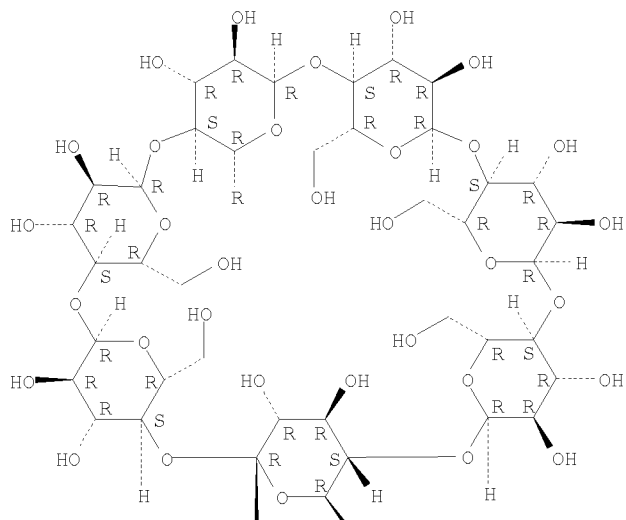


RN 211360-87-1 CAPLUS

CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylglycyl-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

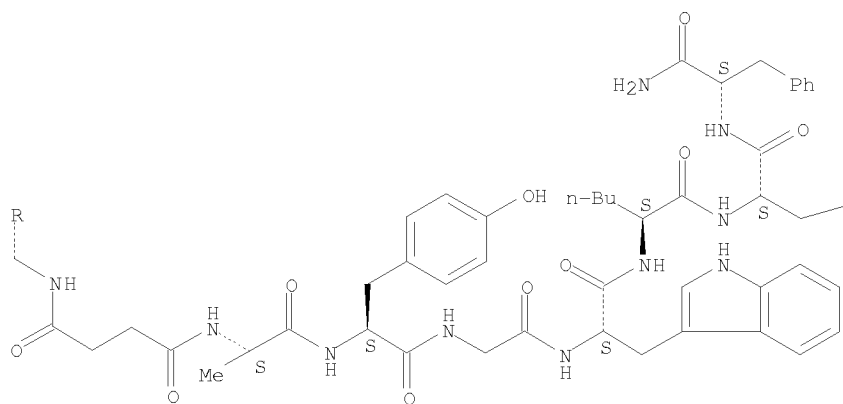
PAGE 1-A



PAGE 2-A



PAGE 3-A



PAGE 3-B



REFERENCE COUNT:

16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:605270 CAPLUS

DOCUMENT NUMBER: 134:5137

TITLE: Rate enhancement and enantioselectivity in ester hydrolysis catalyzed by cyclodextrin-peptide hybrids

AUTHOR(S): Tsutsumi, Hiroshi; Hamasaki, Keita; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Midori-ku, Graduate School of Bioscience and Biotechnology, Department of Bioengineering, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

SOURCE: Perkin 2 (2000), (9), 1813-1818

CODEN: PRKTFO; ISSN: 1470-1820

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A pair of cyclodextrin-peptide hybrids (CD-peptides) having three functional groups,  $\beta$ - cyclodextrin ( $\beta$ -CD), imidazole and carboxylate, in this order and in the reverse order, were designed and synthesized as hydrolytic catalysts. These CD-peptides were designed so as to make three functional groups placed on the same side of the  $\alpha$ -helix peptide work together. Another pair of CD-peptide hybrids which lack the carboxylate were also designed and synthesized in order to examine the effect of the carboxylate in the novel catalysts. CD studies revealed that these CD-peptides have stable  $\alpha$ -helix structures and their  $\alpha$ -helix contents were high enough (around 70%) to place the functional groups at appropriate positions in the CD-peptides. Boc-D-alanine p-nitrophenyl ester and Boc-L-alanine p-nitrophenyl ester were chosen as substrates and the enantioselectivity of the catalysts in the hydrolysis was examined. Kinetic studies suggested that the presence of carboxylate in the CD-peptides enhances the ester hydrolysis with substrate selectivity.

IT **283174-31-2P 283174-32-3P 308803-69-2P 308803-70-5P**

RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation);

PREP (Preparation); USES (Uses)

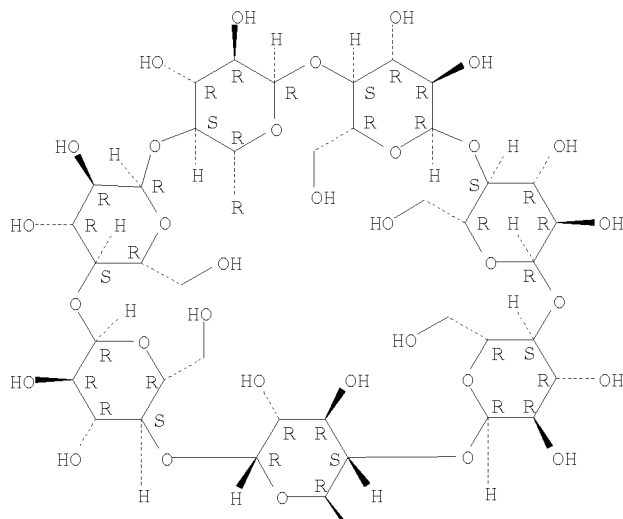
(rate enhancement and enantioselectivity in amino acid ester hydrolysis catalyzed by synthetic cyclodextrin-peptide hybrids)

RN 283174-31-2 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

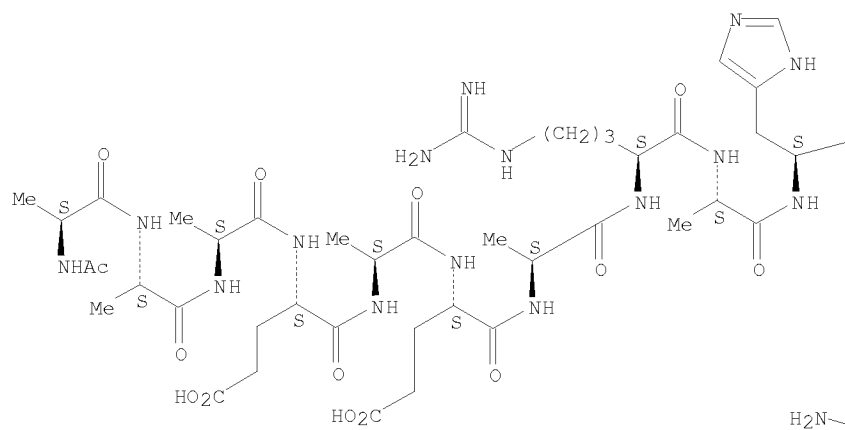
PAGE 1-A



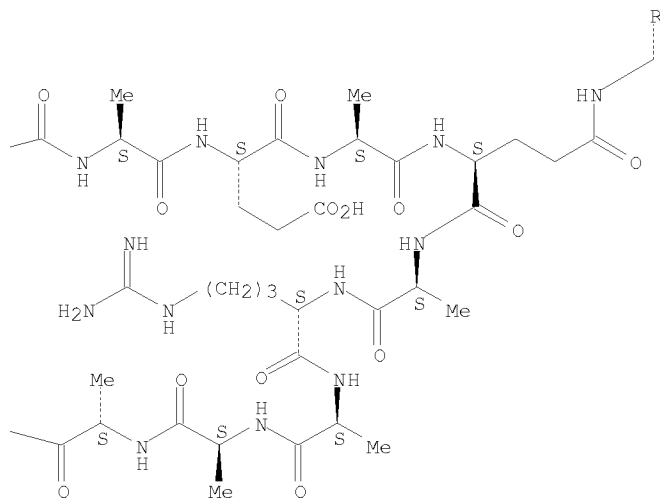
PAGE 2-A



PAGE 3-A



PAGE 3-B

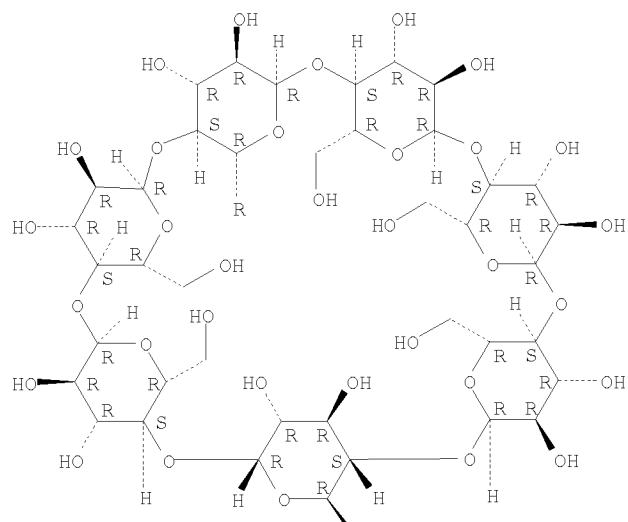


RN 283174-32-3 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

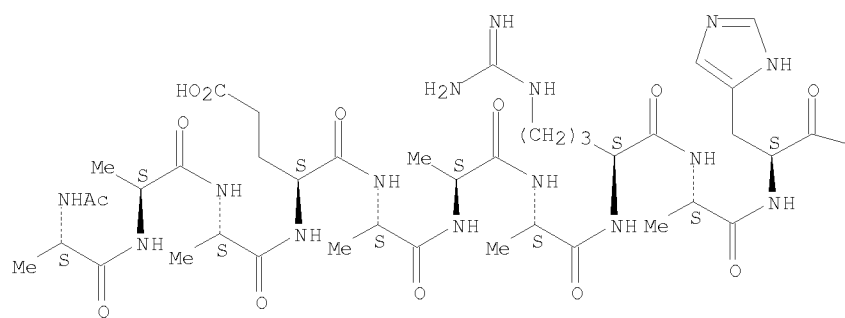
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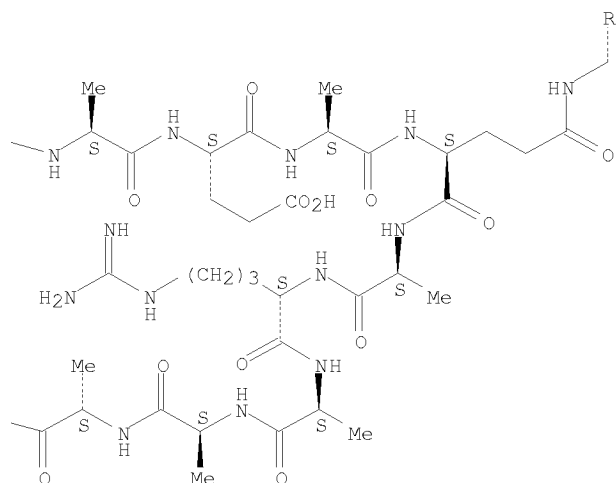


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PAGE 3-A

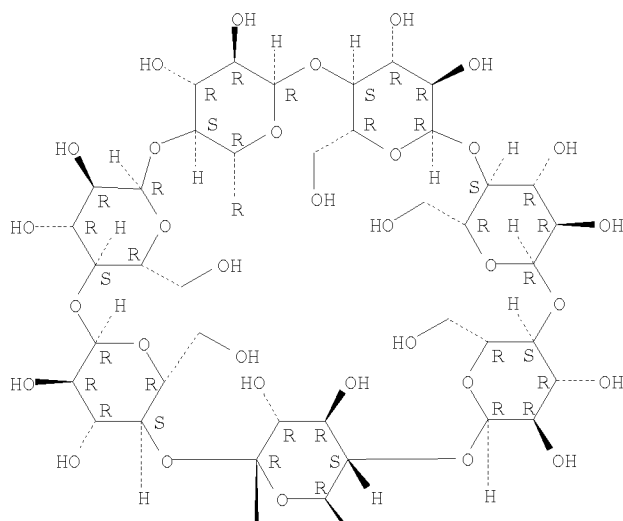
 $\text{H}_2\text{N}$



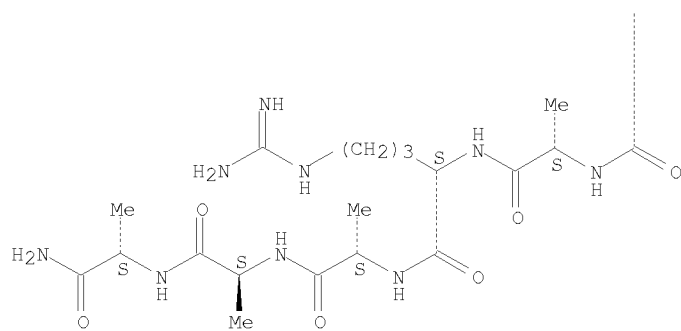
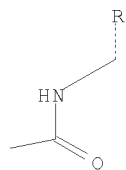
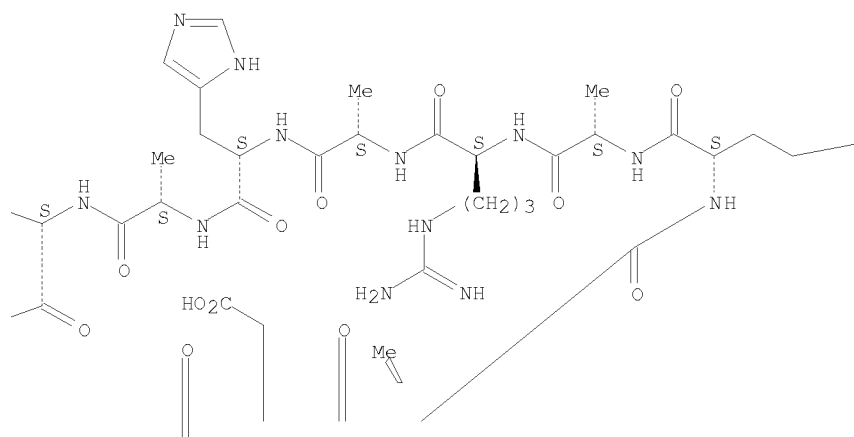
RN 308803-69-2 CAPLUS

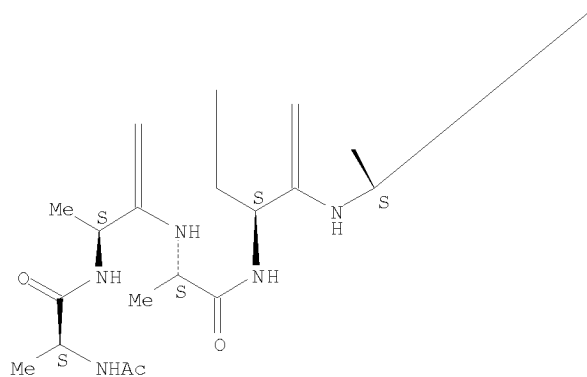
CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*





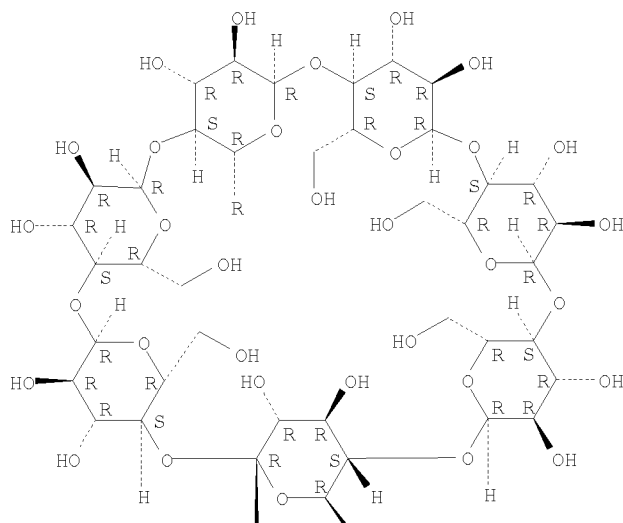
PAGE 3-B

RN 308803-70-5 CAPLUS

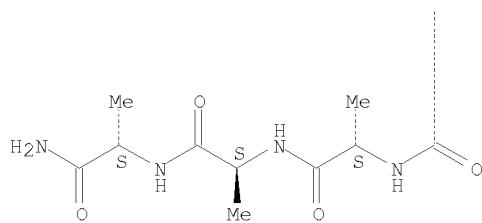
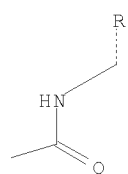
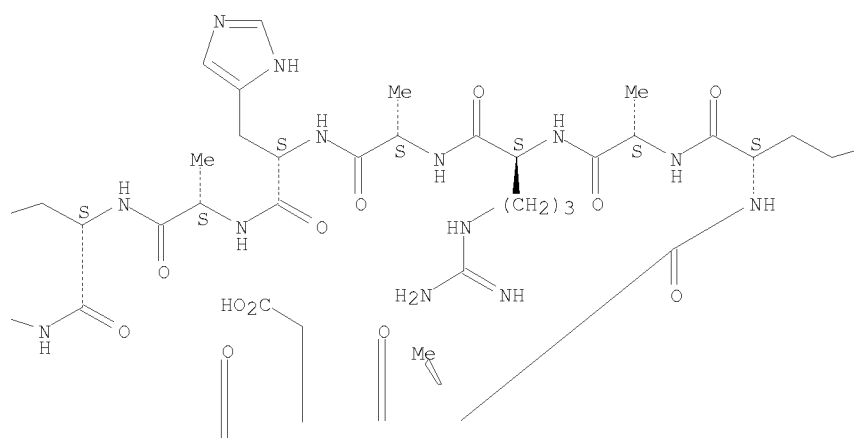
CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

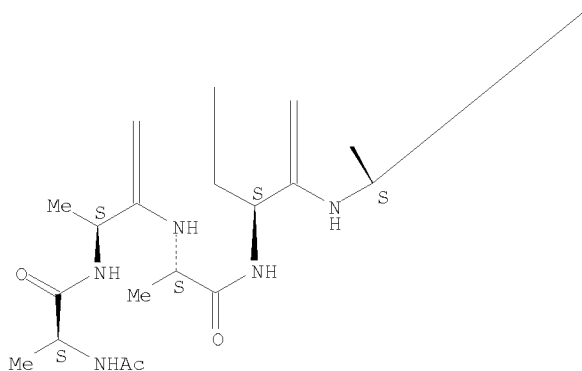
Absolute stereochemistry.

PAGE 1-A



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*





PAGE 3-B

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:426677 CAPLUS

DOCUMENT NUMBER: 133:267113

TITLE: Association of  $\alpha$ -helix peptides that have  $\gamma$ - cyclodextrin and pyrene units in their side chain, and induction of dissociation of the association dimer by external stimulant molecules

AUTHOR(S): Hossain, Mohammed Akhter; Matsumura, Sachiko; Kanai, Takuya; Hamasaki, Keita; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Faculty of Bioscience and Biotechnology, Department of Bioengineering, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

SOURCE: Perkin 2 (2000), (7), 1527-1533  
CODEN: PRKTFO; ISSN: 1470-1820

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB  $\alpha$ -Helical peptides bearing one unit of  $\gamma$ - cyclodextrin ( $\gamma$ -CD), and one or two units of pyrene in their side chain have been designed and synthesized as a novel system of peptide dimerization. The dimer was formed based on inclusion of two pyrene units in the  $\gamma$ - cyclodextrin cavity, and the dissociation of the peptide dimer was induced by external stimulant mols. (guests). CD studies showed that the cyclodextrin-peptide hybrids (CD-peptides) maintain relatively rich  $\alpha$ -helix content (61 to 81%), which was not affected by the guest inclusion into the cyclodextrin cavity. Fluorescence studies revealed that these CD-peptides form stable association dimers, which exhibit excimer emission. The intensity of the pyrene excimer emission decreased upon addition of the guest mols., indicating dissociation of the CD-peptide dimers to the monomer CD-peptides. These CD-peptide hybrids bind structurally similar steroidal compds. with remarkable discrimination. These results demonstrate that this mol.-assembly system, based on host-guest chemical, could be applicable to the development of mol.-responsive materials or a mol.-sensing system.

IT 296271-37-9 296271-38-0 296271-39-1  
296271-40-4 296271-41-5 296271-42-6  
296271-43-7 296271-44-8

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(binding of steroids by helical peptides containing  $\gamma$ - cyclodextrin and pyrene units in their side chain)

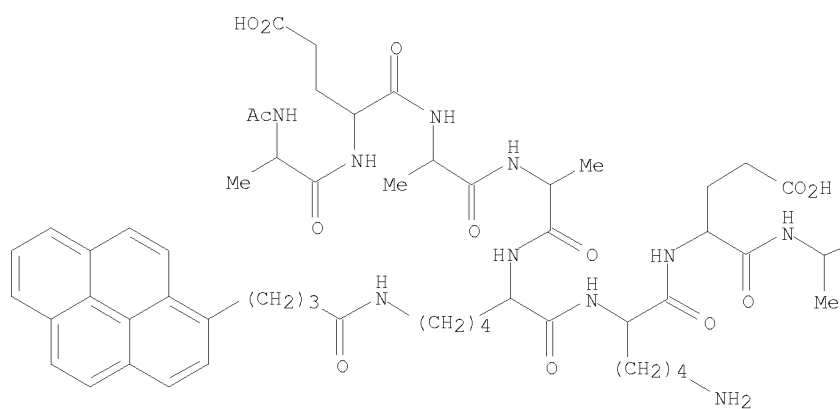
RN 296271-37-9 CAPLUS

CM Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd. with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

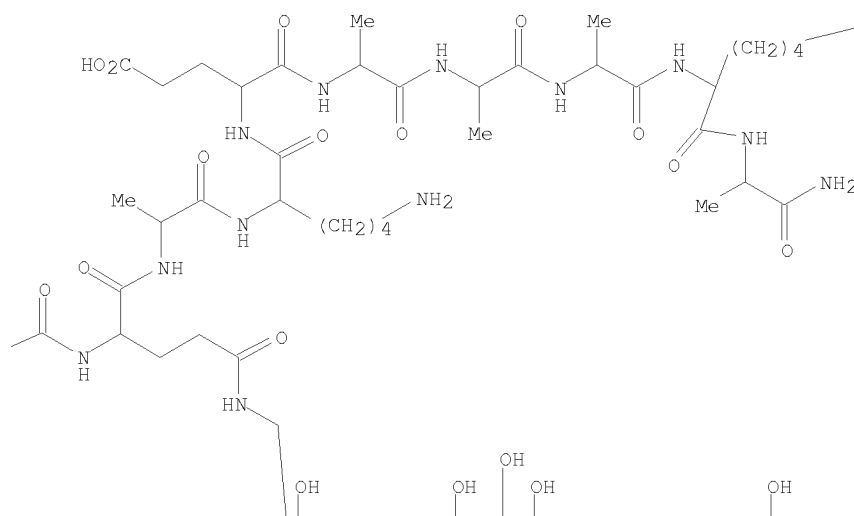
CM 1

CRN 296271-34-6  
 CME C141 H219 N23 O65

PAGE 1-A



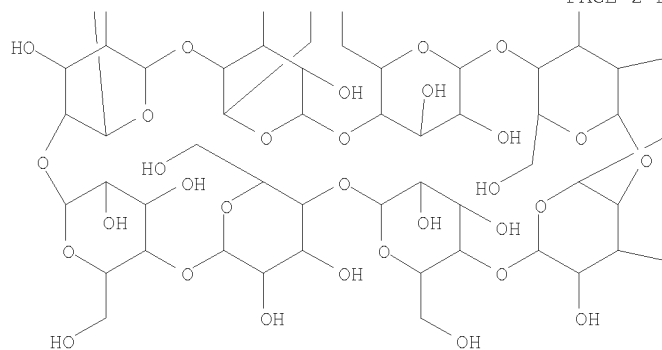
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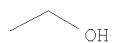
PAGE 1-C

—NH<sub>2</sub>

PAGE 2-B



PAGE 2-C

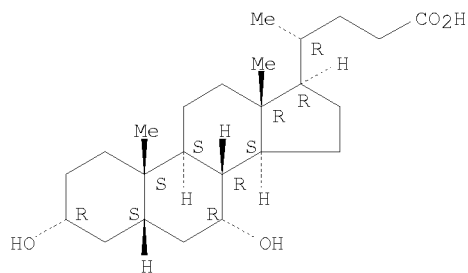


CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



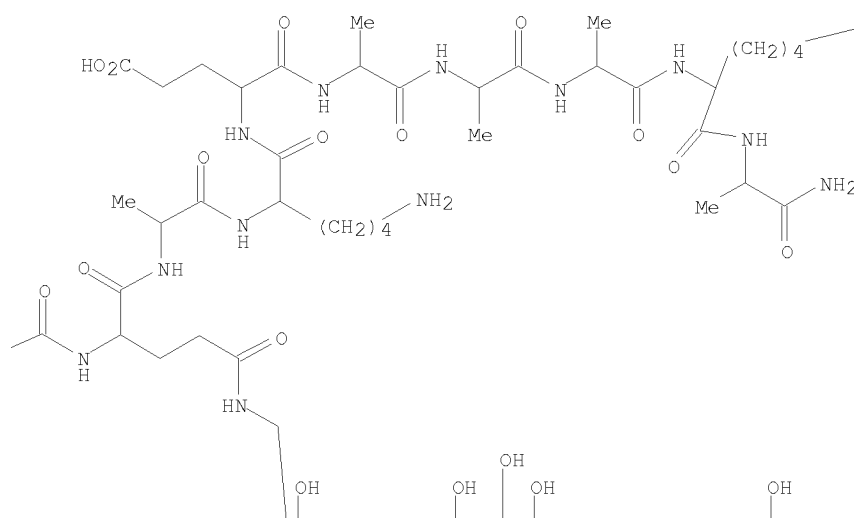
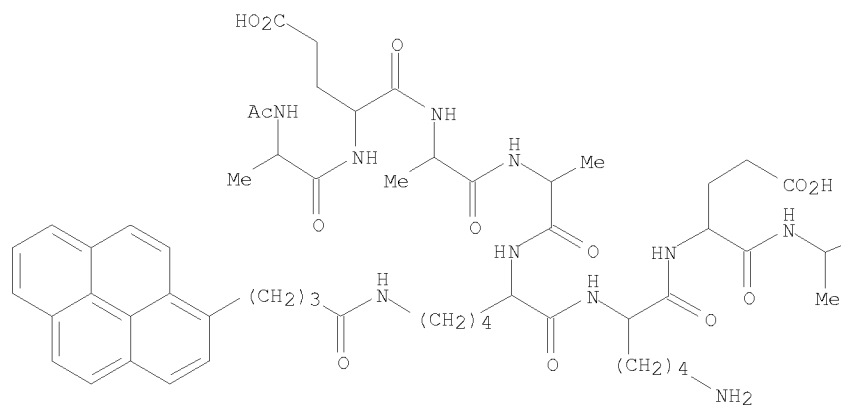
RN 296271-38-0 CAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,12 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

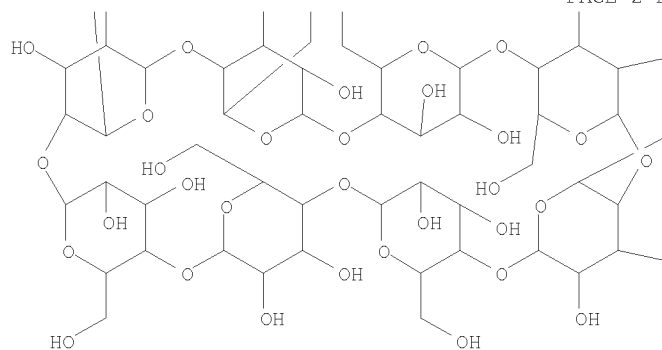
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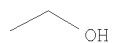
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PAGE 2-B



PAGE 2-C

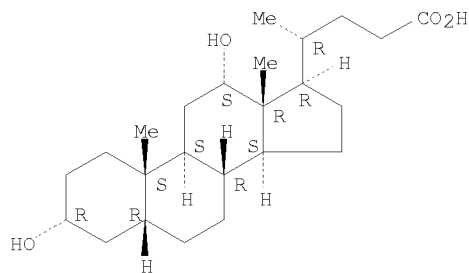


CM 2

CRN 83-44-3

CMF C24 H40 O4

Absolute stereochemistry.



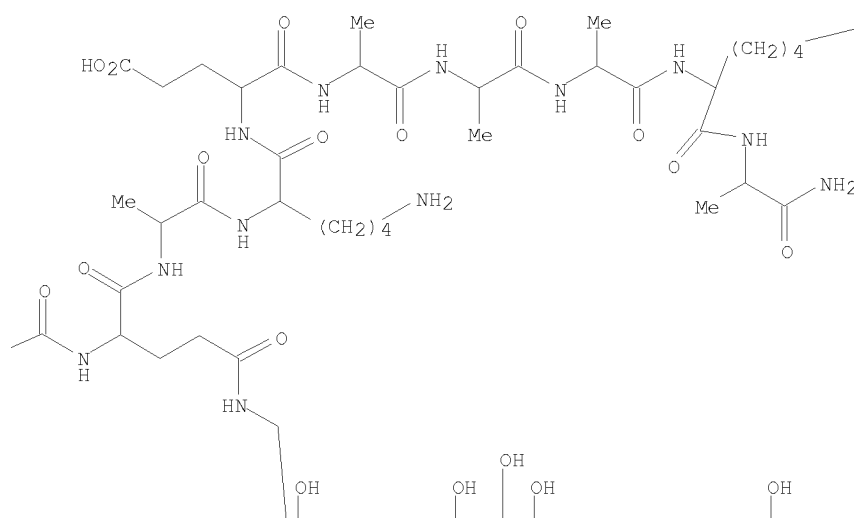
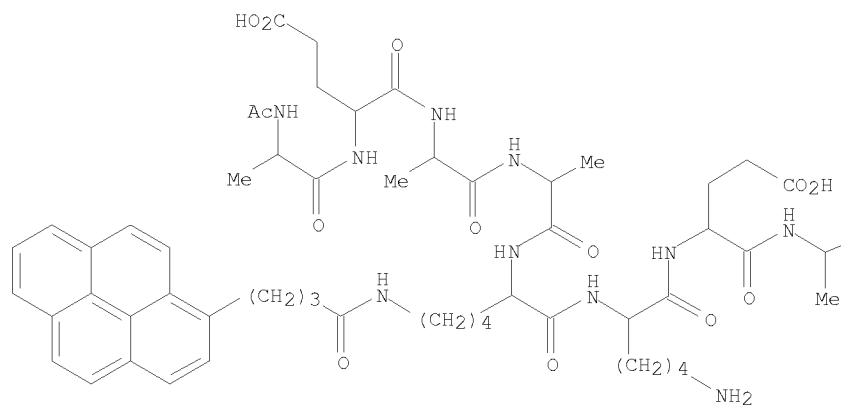
RN 296271-39-1 CAPLUS

CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

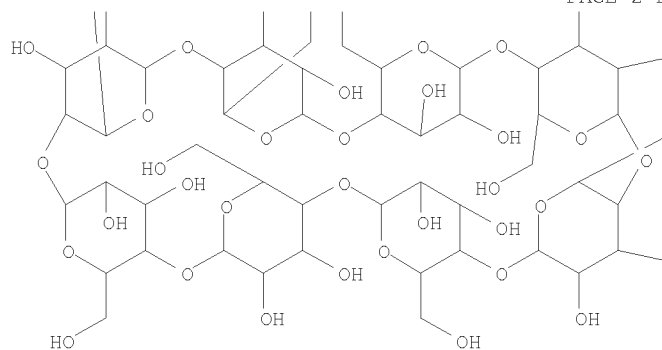
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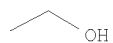
CMF C141 H219 N23 O65



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PAGE 2-C

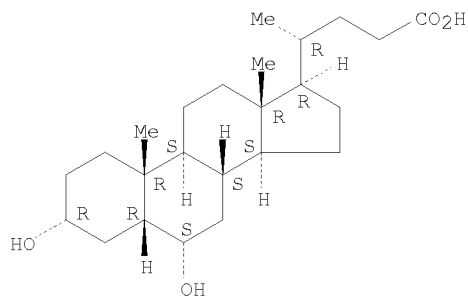


CM 2

CRN 83-49-8

CMF C24 H40 O4

Absolute stereochemistry.



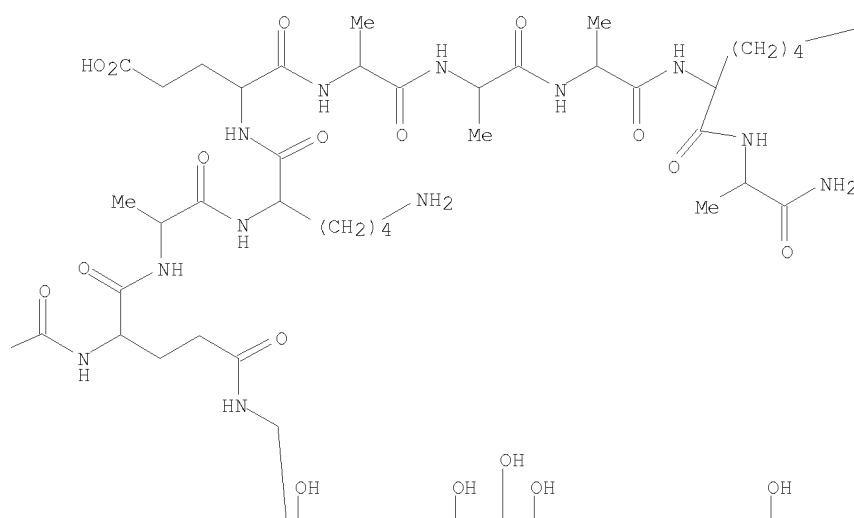
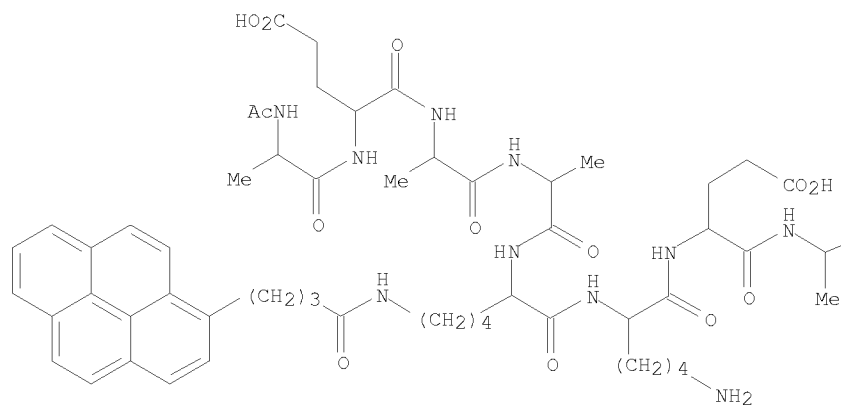
RN 296271-40-4 CAPLUS

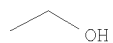
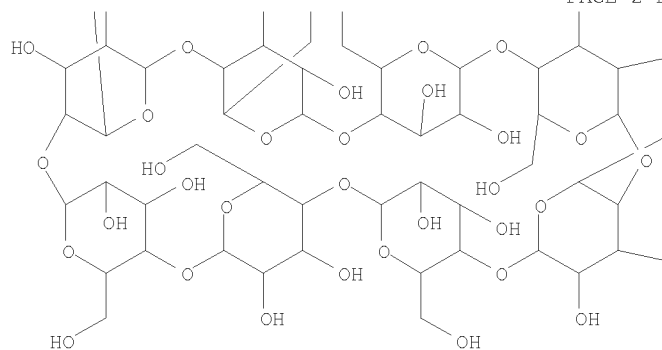
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 296271-34-6

CMF C141 H219 N23 O65



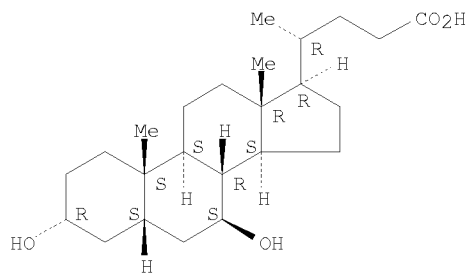


CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



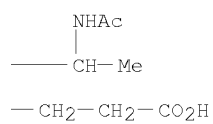
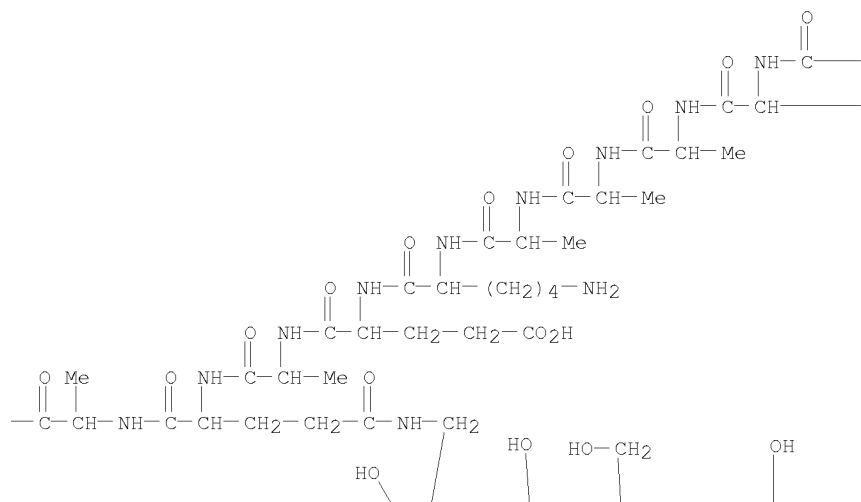
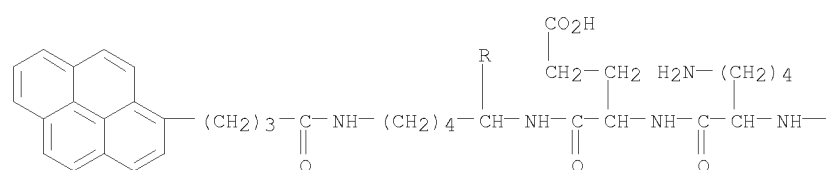
RN 296271-41-5 CAPLUS

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 lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-  
 L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[1-oxo-4-(1-  
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 (CA INDEX NAME)

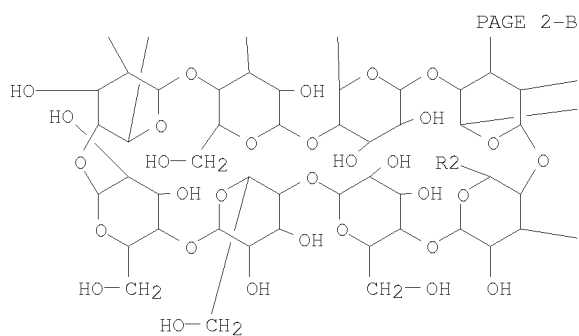
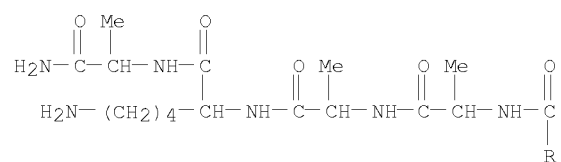
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CRN 270079-04-4

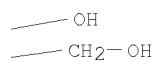
CMF C141 H219 N23 O65



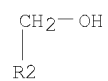
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PAGE 3-A



CM 2

CRN 474-25-9  
CMF C24 H40 O4

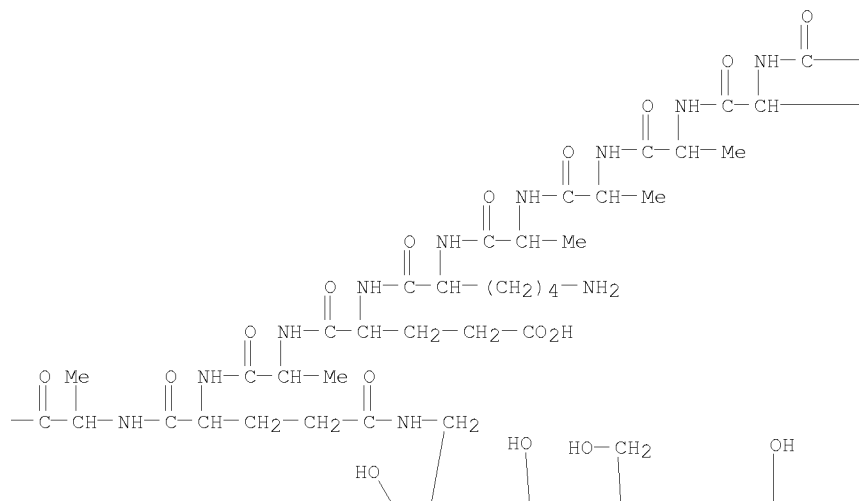
PAGE 1-A

The diagram shows a steroid molecule with four fused rings (A, B, C, D). Substituents include: a hydroxyl group (HO) at C3, a methyl group (Me) at C10, a methyl group (Me) at C13, a hydroxyl group (OH) at C14, a methyl group (Me) at C14, a methyl group (Me) at C17, and a carboxylic acid group (CO<sub>2</sub>H) at C17. Stereochemistry is indicated with wedges and dashes at C10, C13, C14, and C17. 'R' labels are placed near several chiral centers.

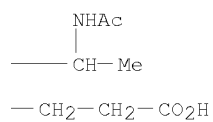
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$$\text{Anthracene}-(\text{CH}_2)_3-\text{C}(=\text{O})\text{NH}-(\text{CH}_2)_4-\text{CH}(\text{R})\text{NH}-\text{C}(=\text{O})\text{CH}(\text{CH}_2\text{CO}_2\text{H})\text{NH}-\text{C}(=\text{O})\text{CH}(\text{CH}_2\text{NH}(\text{CH}_2)_4\text{NH}_2)\text{NH}-$$

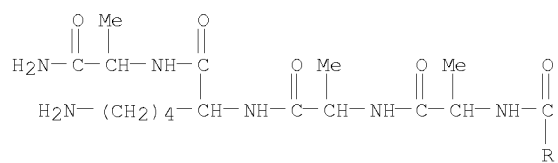
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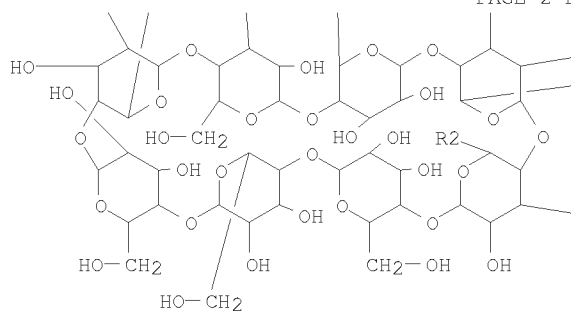
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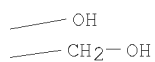
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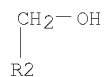
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PAGE 2-C



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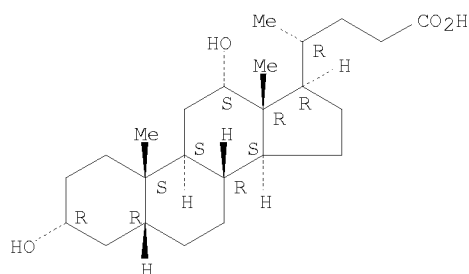


CM 2

CRN 83-44-3

CMF C24 H40 O4

Absolute stereochemistry.



RN 296271-43-7 CAPLUS

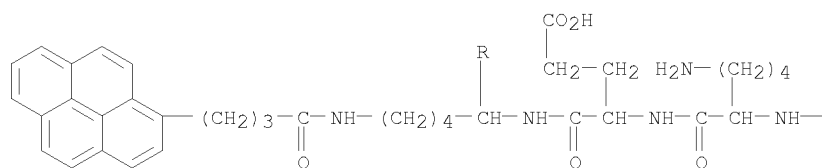
CN Cholan-24-oic acid, 3,6-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,6 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-  
 lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-  
 L-glutaminy-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[1-oxo-4-(1-  
 pyrenyl)butyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI)  
 (CA INDEX NAME)

CM 1

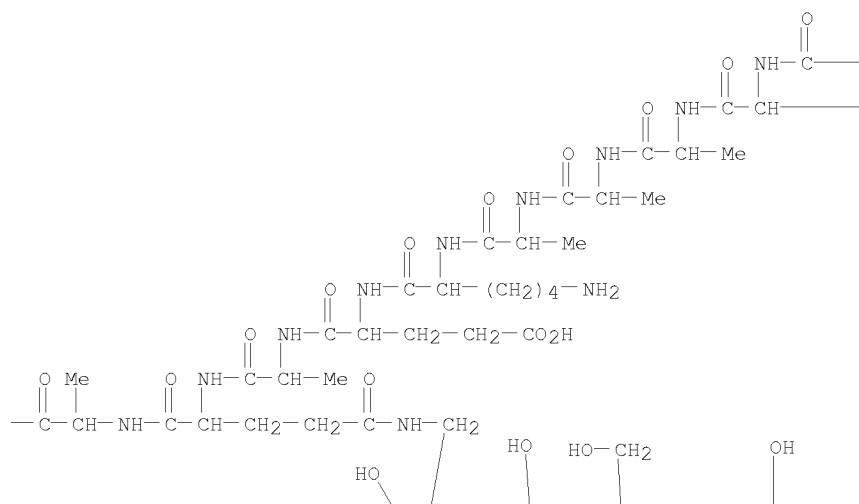
CRN 270079-04-4

CMF C141 H219 N23 O65

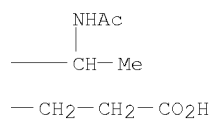
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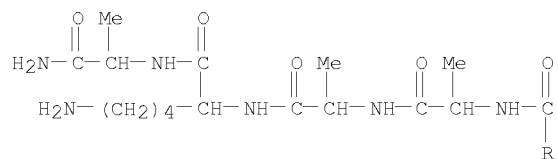
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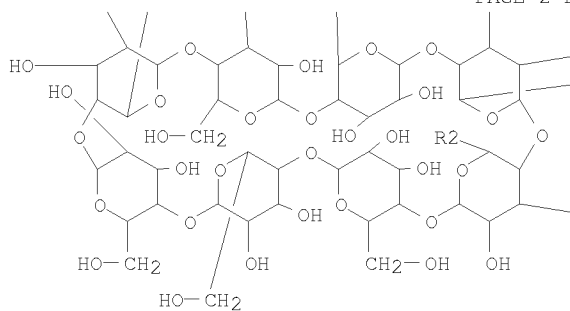
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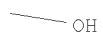
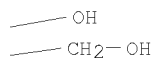
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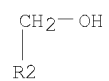
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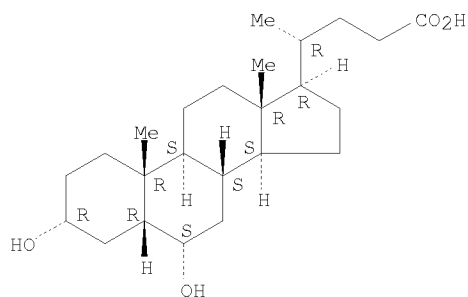


CM 2

CRN 83-49-8  
 CME C24 H40 O4

10576346

Absolute stereochemistry.



RN 296271-44-8 CAPLUS

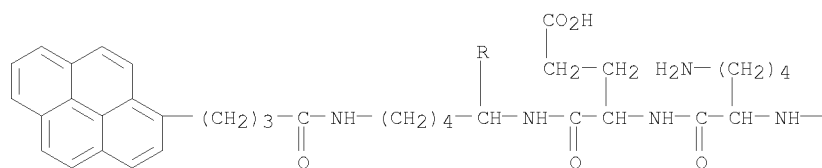
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-  
L-glutaminy-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[1-oxo-4-(1-  
pyrenyl)butyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI)  
(CA INDEX NAME)

CM 1

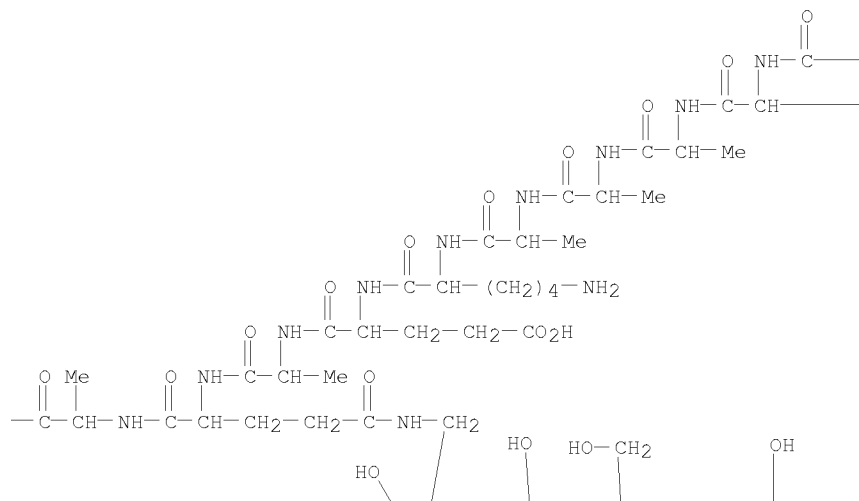
CRN 270079-04-4

CMF C141 H219 N23 O65

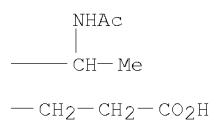
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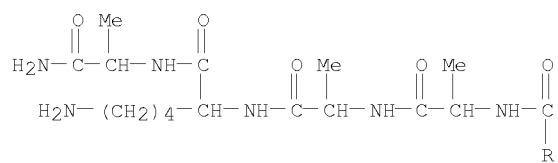
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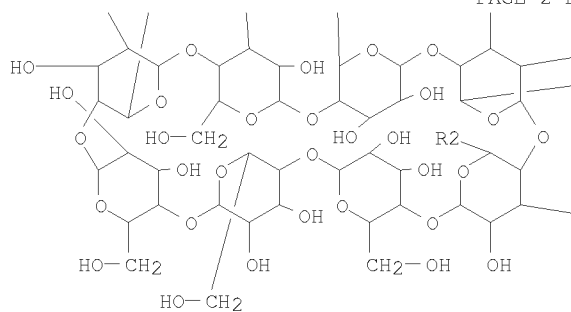
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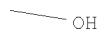
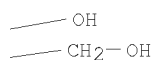
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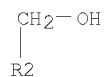
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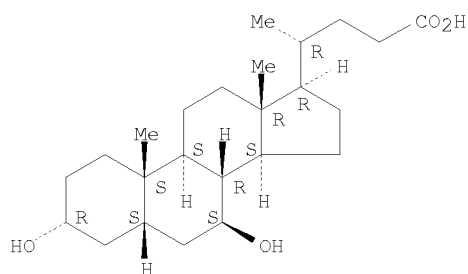
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CM 2

CRN 128-13-2  
CMF C24 H40 O4

Absolute stereochemistry.

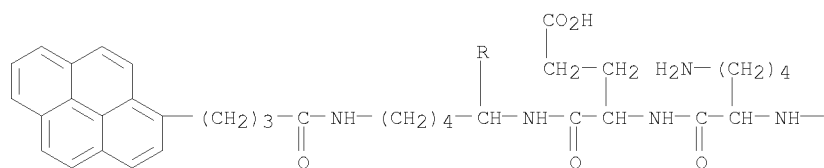
IT **270079-04-4P 296271-34-6P**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(preparation of helical peptides containing  $\gamma$ - **cyclodextrin** and pyrene units in their side chain and their association dimer formation study by CD)

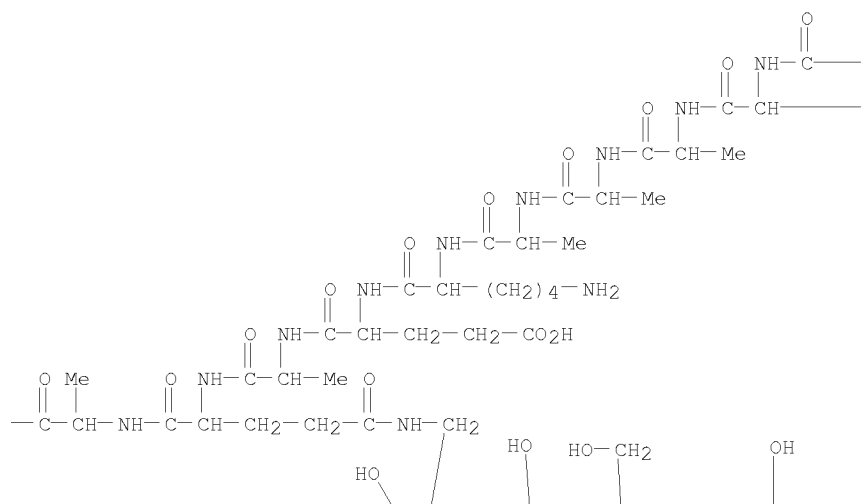
RN 270079-04-4 CAPLUS

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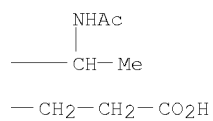
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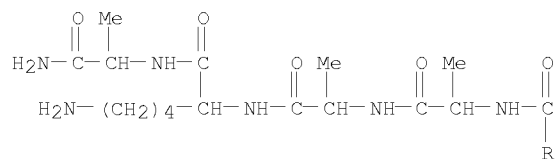
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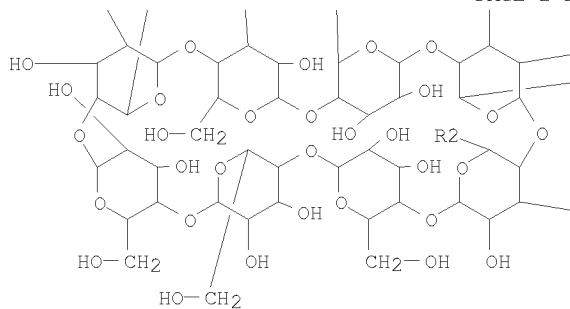
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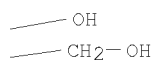
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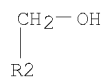
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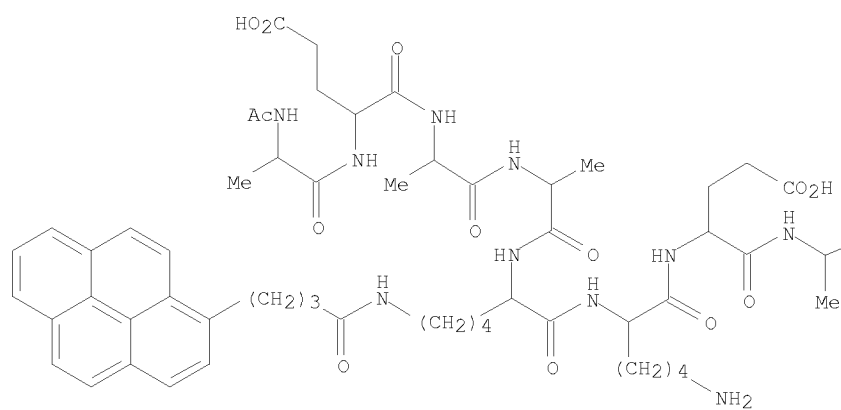


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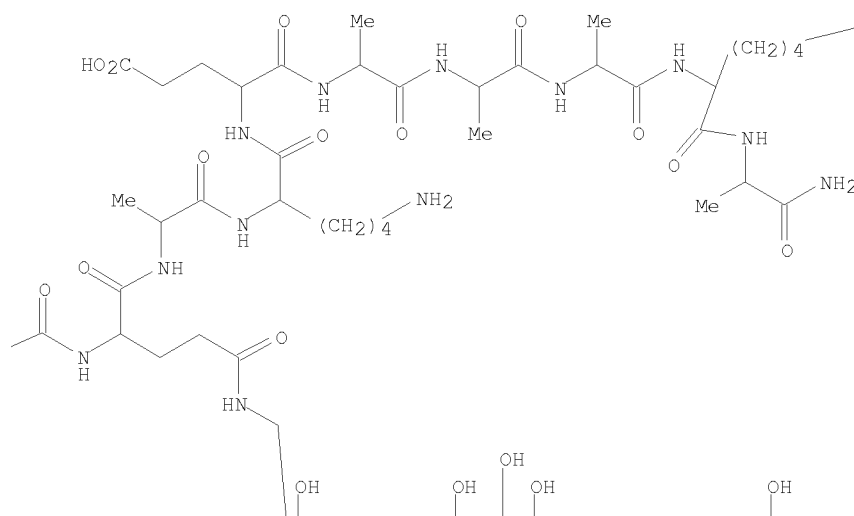


RN 296271-34-6 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[1-oxo-4-(1-pyrenyl)butyl]-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

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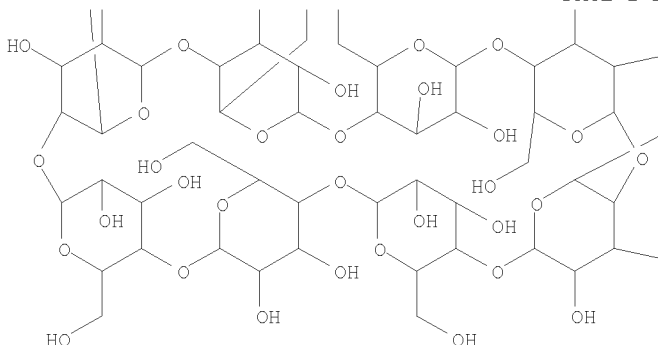
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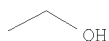
PAGE 1-C



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REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:422155 CAPLUS

DOCUMENT NUMBER: 133:208157

TITLE: Guest-responsive excimer emission in an  $\alpha$ -helix peptide bearing  $\gamma$ -cyclodextrin and two naphthalene units

AUTHOR(S): Toyoda, Takayuki; Matsumura, Sachiko; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering, Faculty of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

SOURCE: Macromolecular Rapid Communications (2000), 21(8), 485-488

CODEN: MRCOE3; ISSN: 1022-1336

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have designed and synthesized a peptide  $\alpha$ -helix system composed of 17 amino acids with an  $\gamma$ -CD ( $\gamma$ -cyclodextrin) sandwiched between two naphthalene units in the peptide side chain ( $\gamma$ -N217). The authors have also prepared two peptides,  $\gamma$ -NN17 and  $\gamma$ -NC17, which have one  $\gamma$ -CD and one naphthalene unit at the 5th and 13th positions, each having the naphthalene unit at the N-terminal site ( $\gamma$ -NN17) or the C-terminal site ( $\gamma$ -NC17) compared with the position of the  $\gamma$ -CD. For each peptide, the  $\gamma$ -CD and naphthalene unit were designed to be separated by one turn of the  $\alpha$ -helix. Host-guest fluorescence spectra of peptides  $\gamma$ -N217,  $\gamma$ -NN17 and  $\gamma$ -NC17 were obtained with the guest compound being one of the following: ursodeoxycholic acid, chenodeoxycholic acid, deoxycholic acid, cholic acid, lithocholic acid and 1-adamantanol. Binding consts. were measured and the order of the binding consts. for all guest compds. examined is  $\gamma$ -NN17 >  $\gamma$ -NC17 >  $\gamma$ -N217.

IT 289714-48-3 289714-49-4 289714-51-8  
289714-52-9 289714-53-0 289714-54-1

**289714-55-2 289714-56-3 289714-57-4****289714-58-5 289714-59-6 289714-60-9**

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(guest-responsive fluorescence excimer emission in an  $\alpha$ -helical peptide bearing  $\gamma$ - cyclodextrin and naphthalene units)

RN 289714-48-3 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

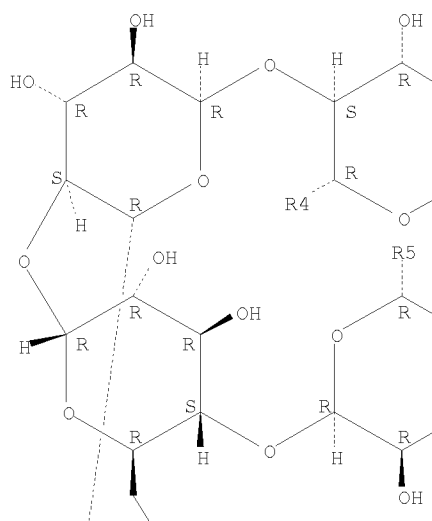
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CRN 289714-45-0

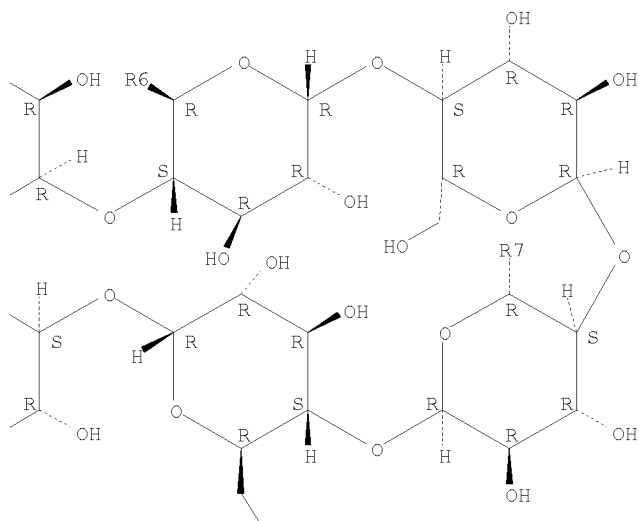
CMF C148 H228 N24 O66

Absolute stereochemistry.

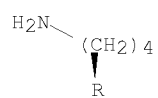
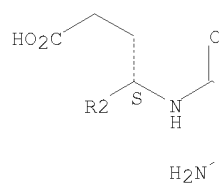
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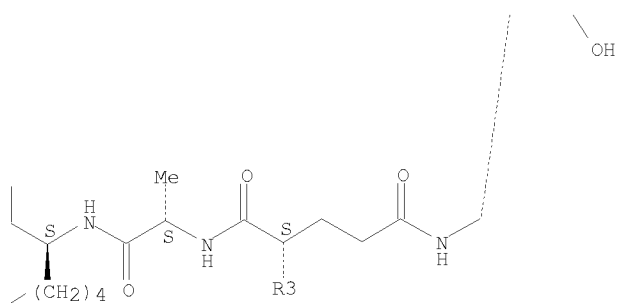
PAGE 1-C



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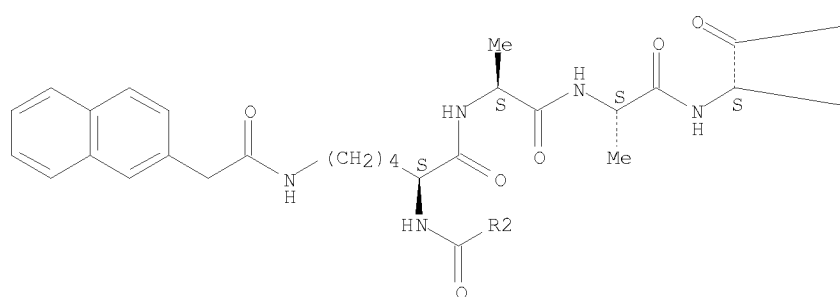
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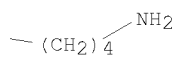
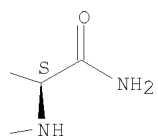
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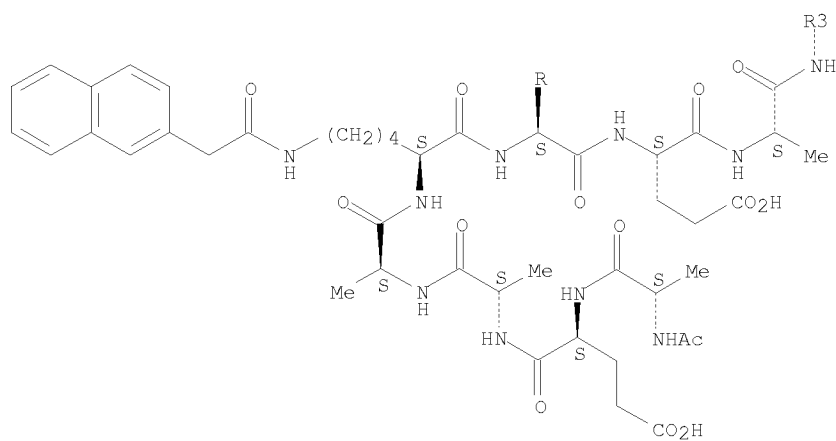
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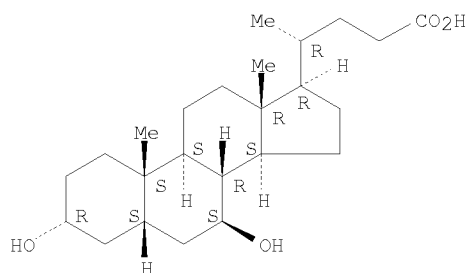
PAGE 5-A



CM 2

CRN 128-13-2  
CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-49-4 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 289714-46-1

CMF C133 H213 N23 O65

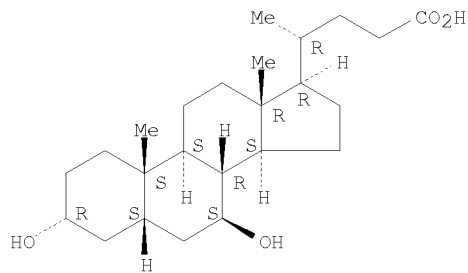
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-51-8 CAPLUS

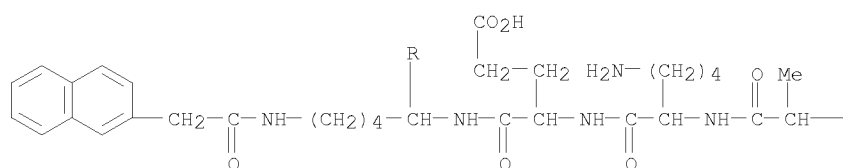
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

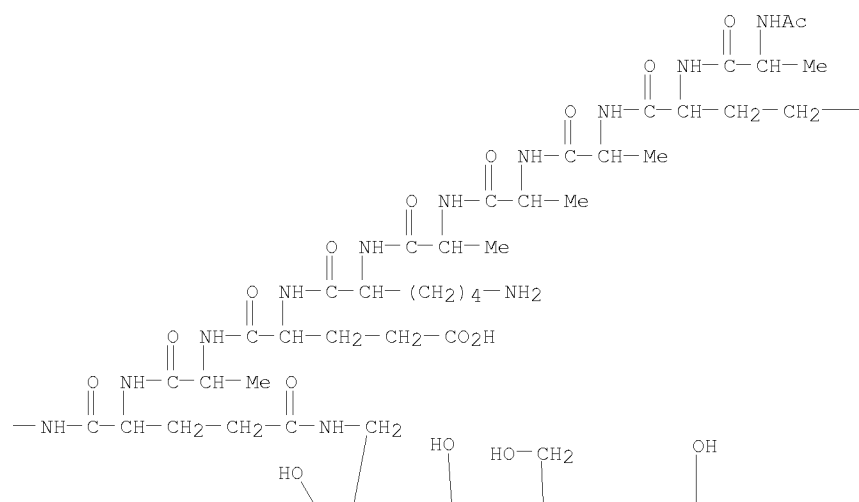
CRN 289714-47-2

CMF C133 H213 N23 O65

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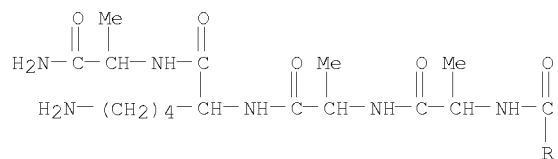
PAGE 1-B



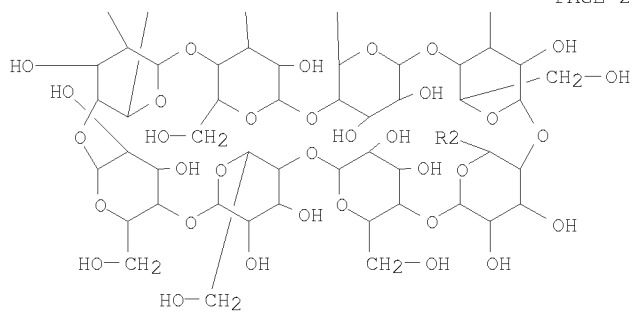
PAGE 1-C



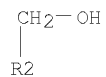
PAGE 2-A



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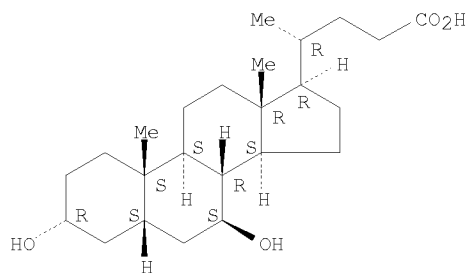


CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-52-9 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

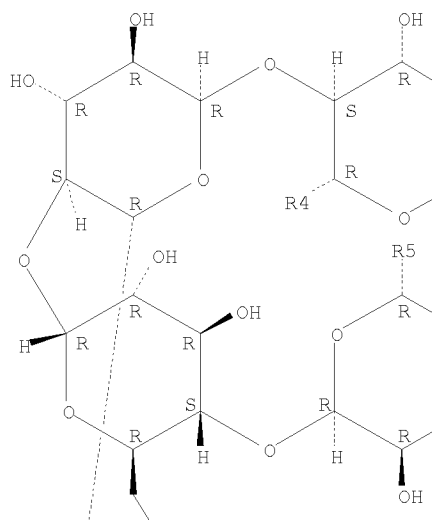
CM 1

CRN 289714-45-0

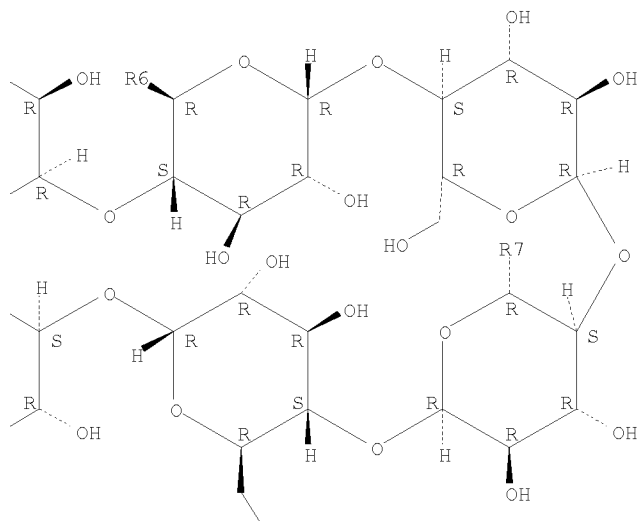
CMF C148 H228 N24 O66

Absolute stereochemistry.

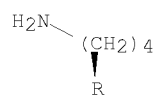
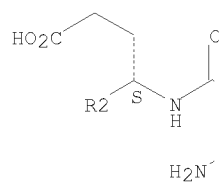
PAGE 1-B



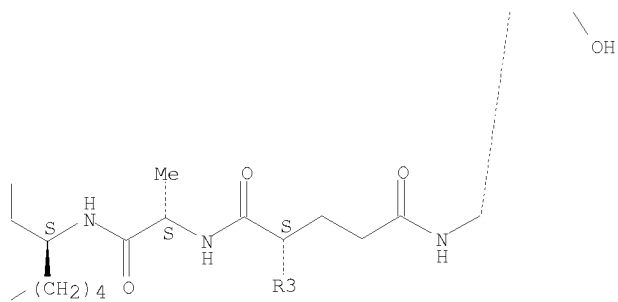
PAGE 1-C



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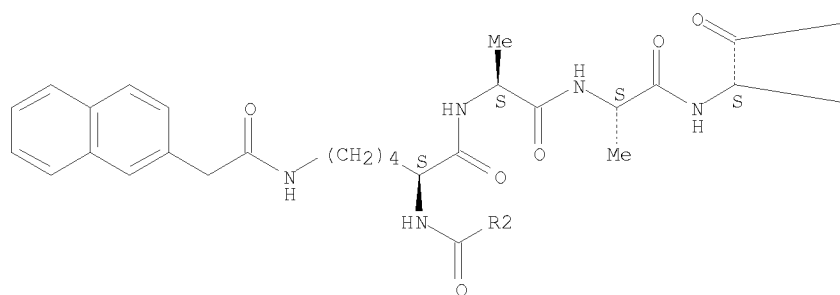


PAGE 2-C

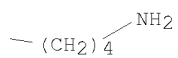
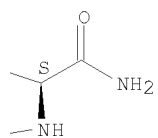


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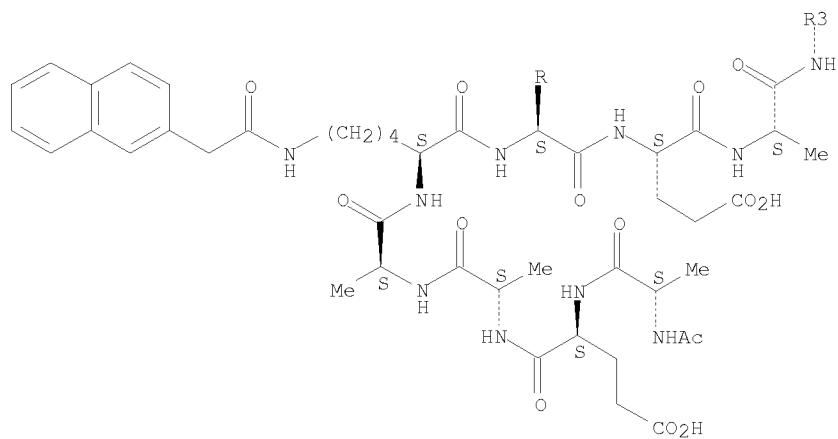
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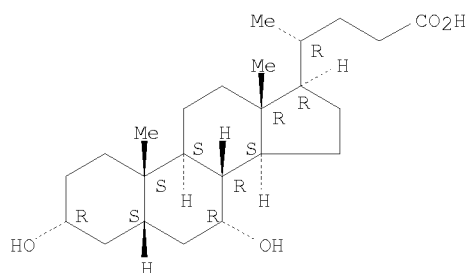
PAGE 5-A



CM 2

CRN 474-25-9  
CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-53-0 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 289714-46-1

CMF C133 H213 N23 O65

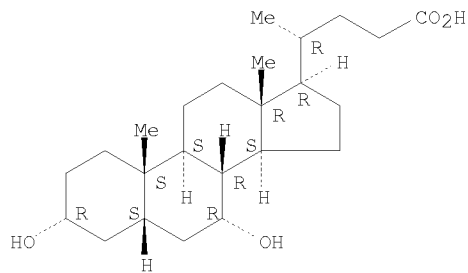
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CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-54-1 CAPLUS

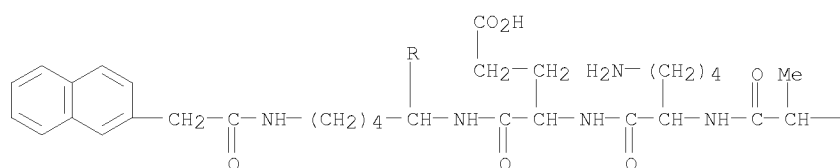
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

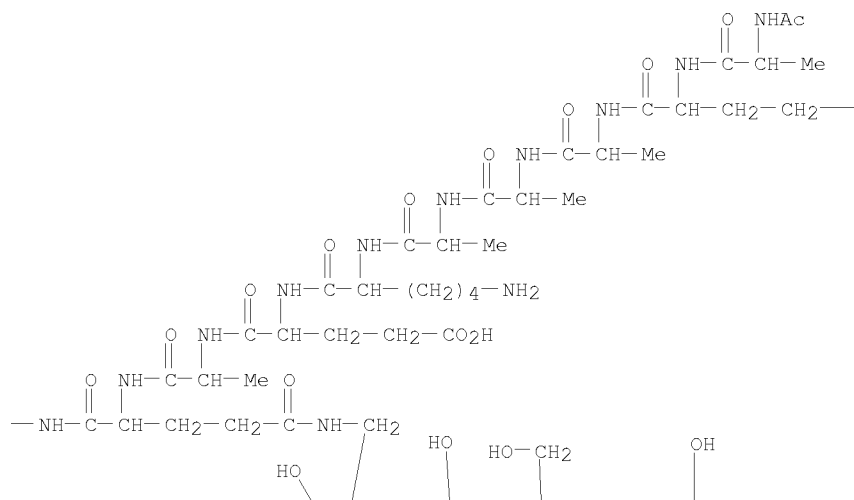
CRN 289714-47-2

CMF C133 H213 N23 O65

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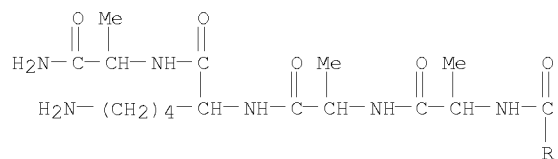
PAGE 1-B



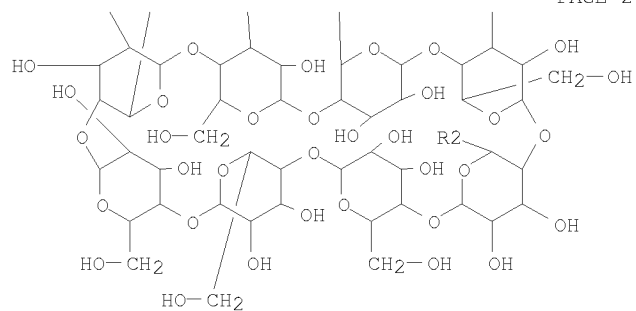
PAGE 1-C

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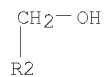
PAGE 2-A



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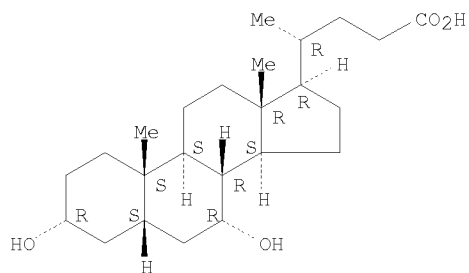


CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-55-2 CAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,12 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

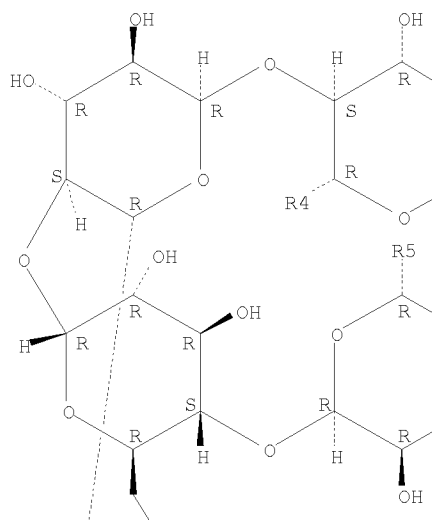
CM 1

CRN 289714-45-0

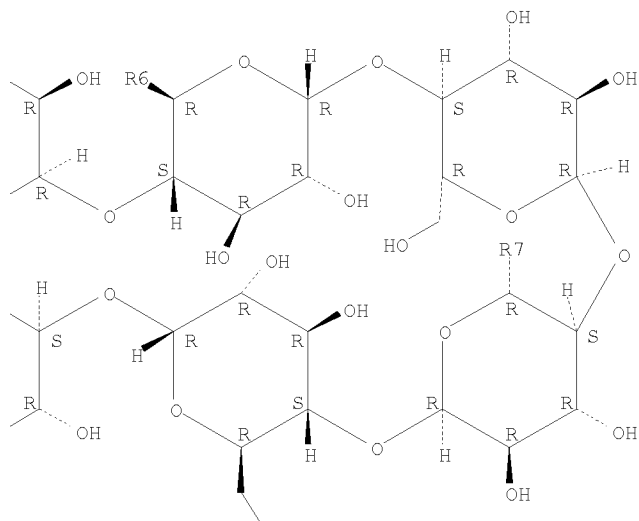
CMF C148 H228 N24 O66

Absolute stereochemistry.

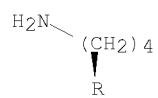
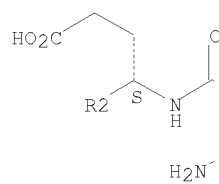
PAGE 1-B



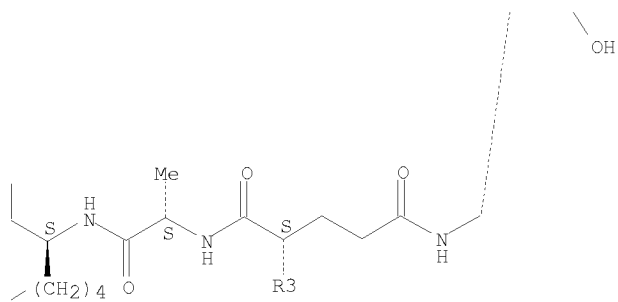
PAGE 1-C



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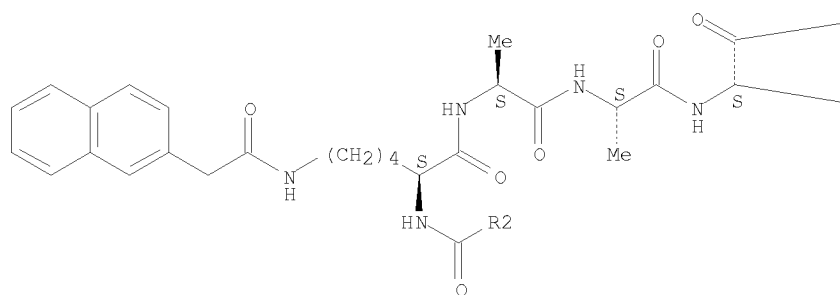


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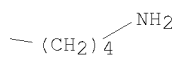
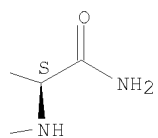


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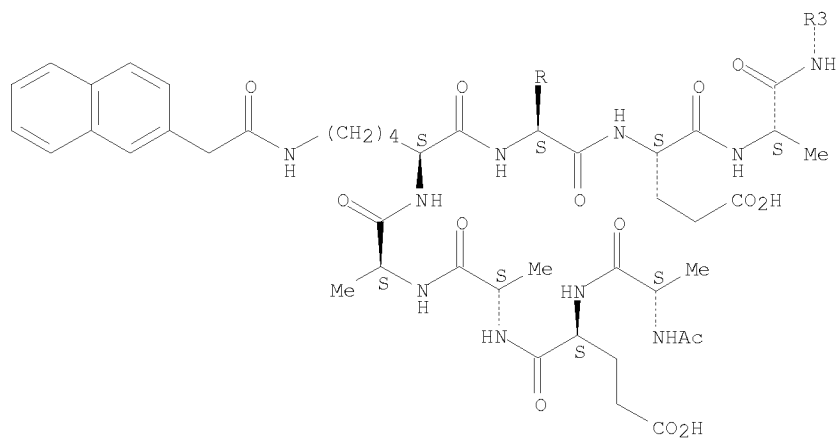
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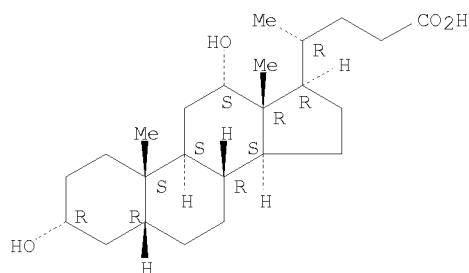


CM 2

CRN 83-44-3

CMF C24 H40 O4

Absolute stereochemistry.



RN 289714-56-3 CAPLUS

CN Cholan-24-oic acid, 3,7,12-trihydroxy-,  
(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-, compd. with  
N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

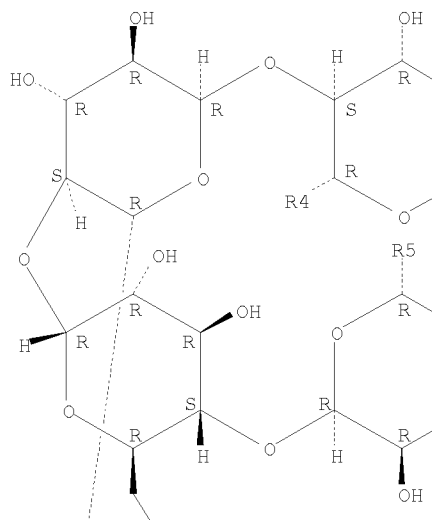
CM 1

CRN 289714-45-0

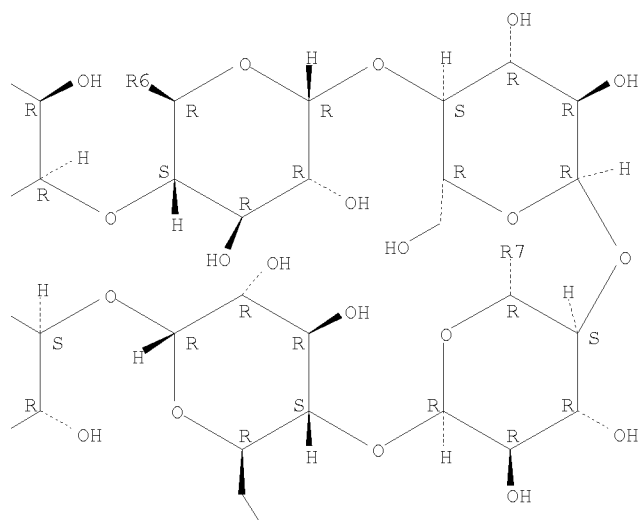
CMF C148 H228 N24 O66

Absolute stereochemistry.

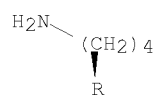
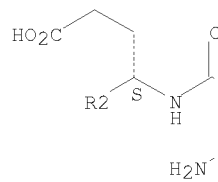
PAGE 1-B



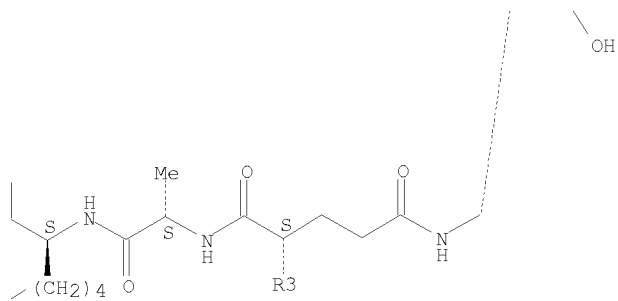
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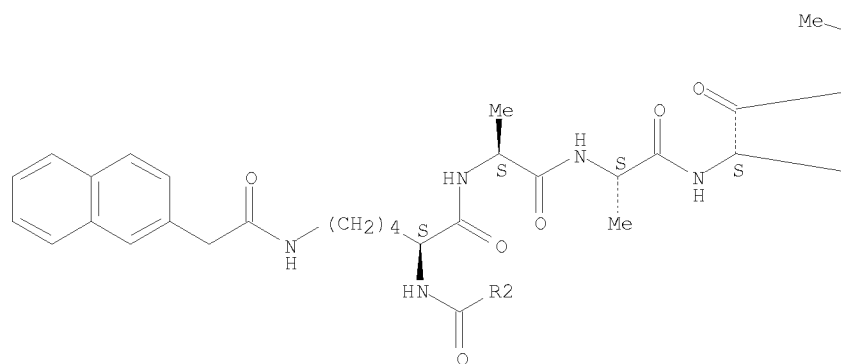
PAGE 2-B



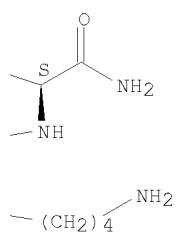
PAGE 2-C



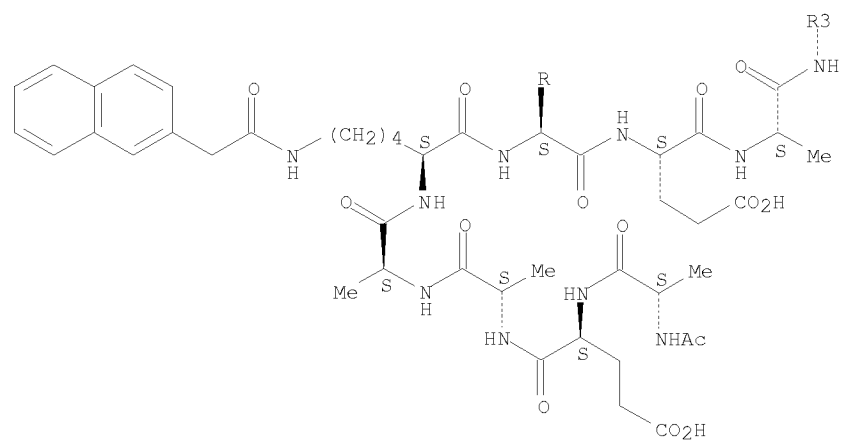
PAGE 3-A



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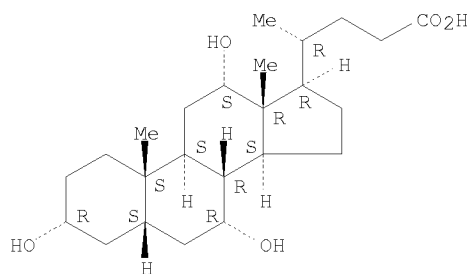


CM 2

CRN 81-25-4

CMF C24 H40 O5

Absolute stereochemistry.



RN 289714-57-4 CAPLUS

CN Cholan-24-oic acid, 3-hydroxy-, (3 $\alpha$ ,5 $\beta$ )-, compd. with  
 N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-  
 naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-  
 deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -  
 glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L-  
 alaninamide (1:1) (9CI) (CA INDEX NAME)

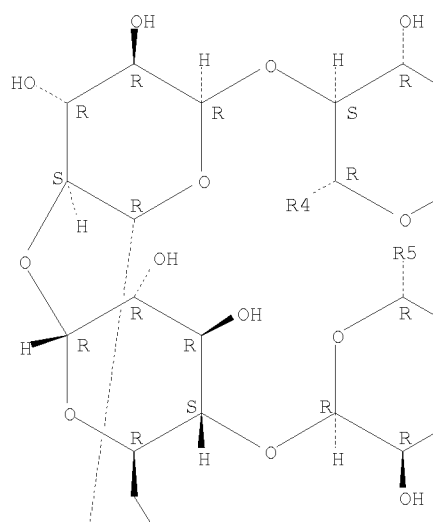
CM 1

CRN 289714-45-0

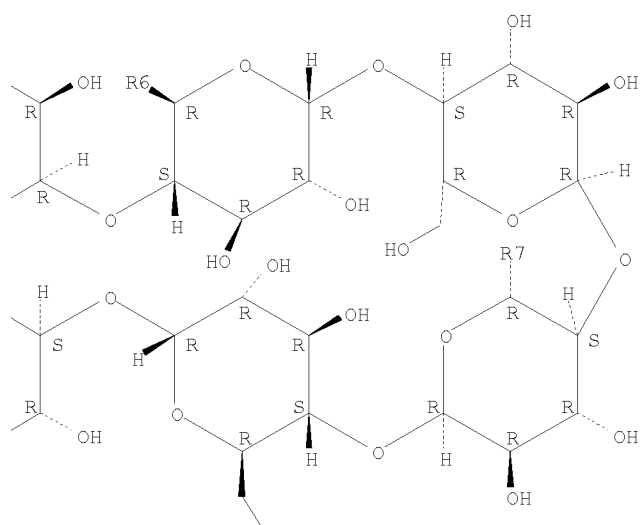
CMF C148 H228 N24 O66

Absolute stereochemistry.

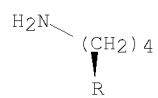
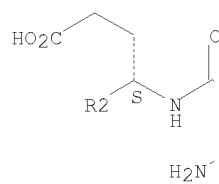
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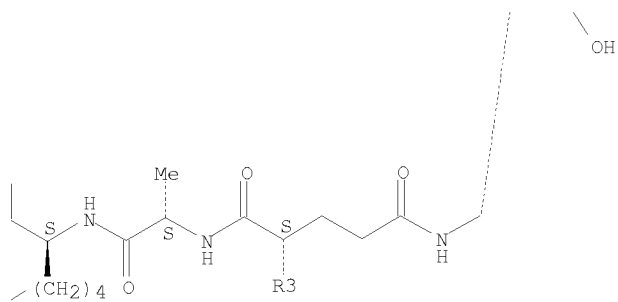
PAGE 1-C



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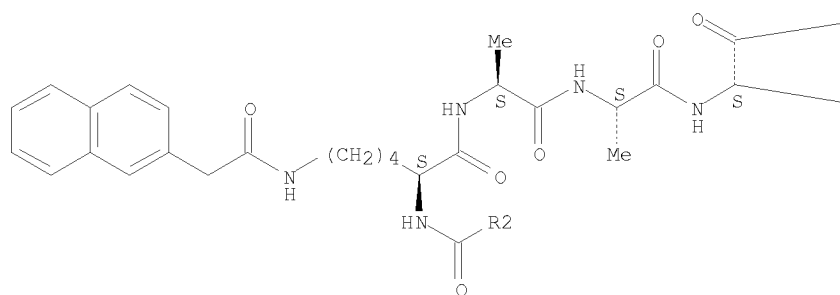


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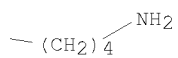
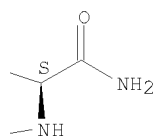


PAGE 3-A

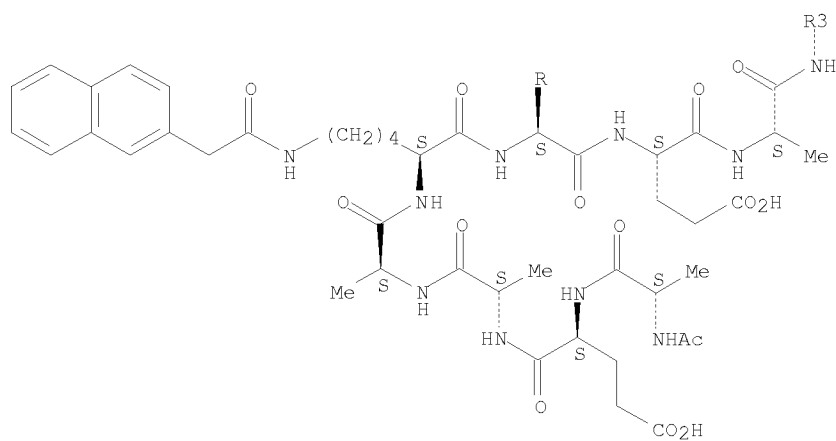
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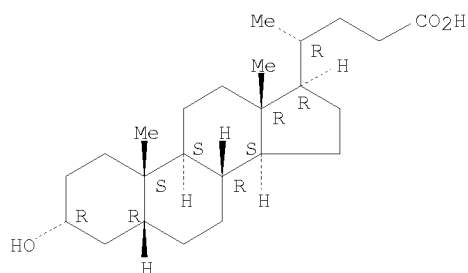
PAGE 5-A



CM 2

CRN 434-13-9  
CMF C24 H40 O3

Absolute stereochemistry.



RN 289714-58-5 CAPLUS

CN Cholan-24-oic acid, 3-hydroxy-, (3 $\alpha$ ,5 $\beta$ )-, compd. with  
N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-  
naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-  
deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutaminyl-L-alanyl-L-lysyl-L- $\alpha$ -  
glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA  
INDEX NAME)

CM 1

CRN 289714-46-1

CMF C133 H213 N23 O65

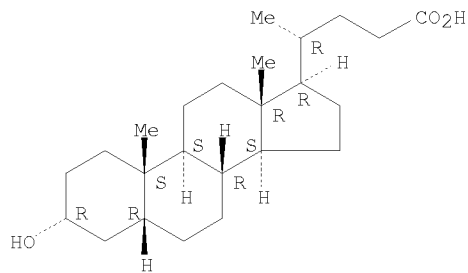
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 434-13-9

CMF C24 H40 O3

Absolute stereochemistry.



RN 289714-59-6 CAPLUS

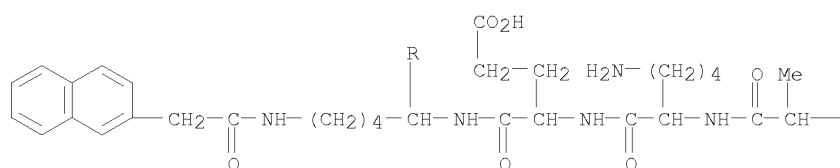
CN Cholan-24-oic acid, 3-hydroxy-, (3 $\alpha$ ,5 $\beta$ )-, compd. with  
N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L-  
 $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-  
glutaminyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-  
lysyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide (1:1) (9CI) (CA INDEX NAME)

CM 1

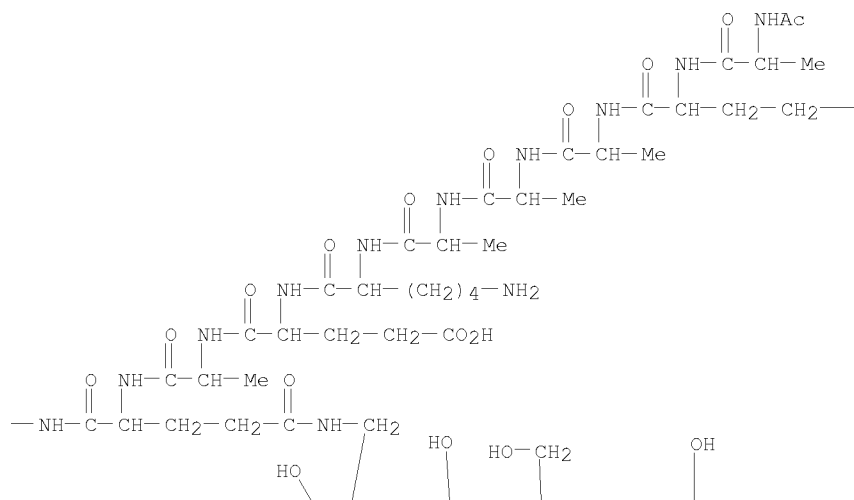
CRN 289714-47-2

CMF C133 H213 N23 O65

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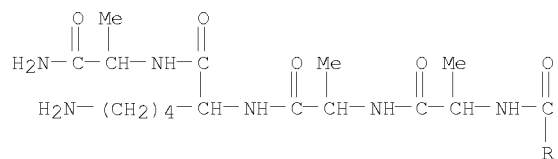
PAGE 1-B



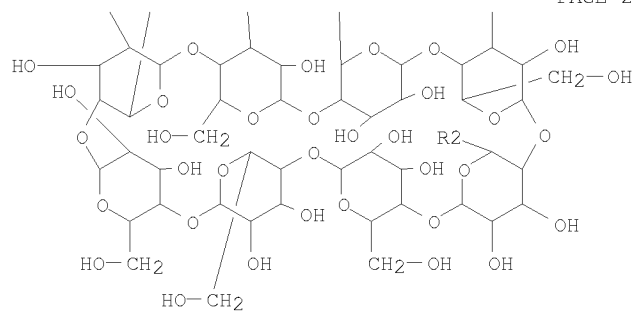
PAGE 1-C



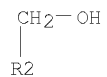
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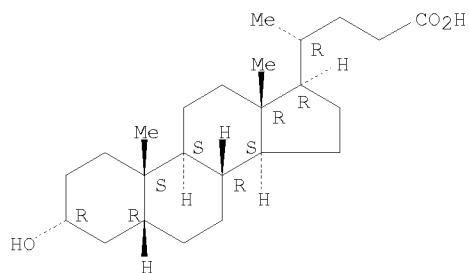


CM 2

CRN 434-13-9

CMF C24 H40 O3

Absolute stereochemistry.



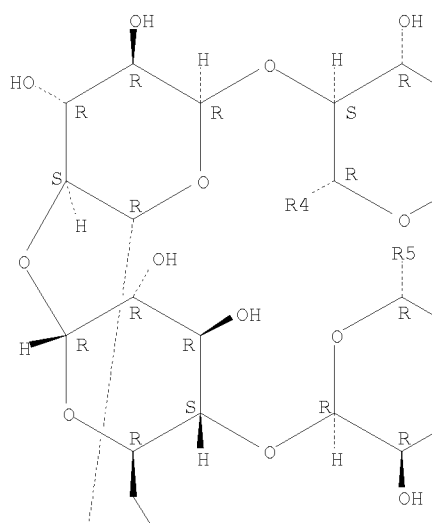
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CM 1

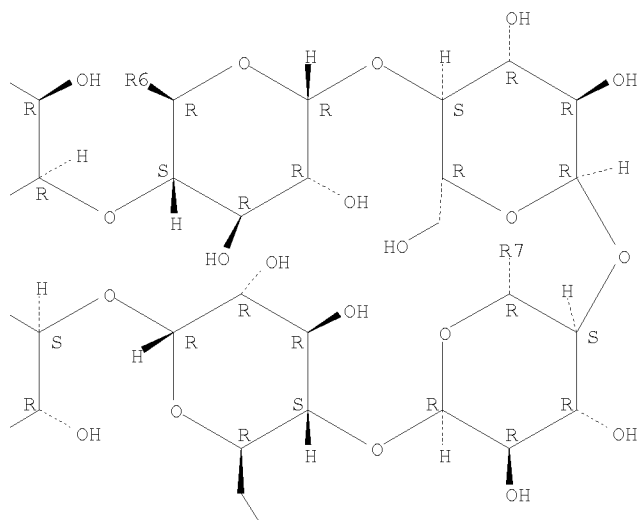
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Absolute stereochemistry.

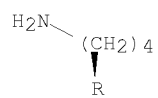
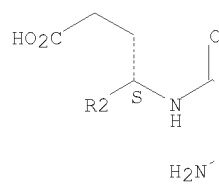
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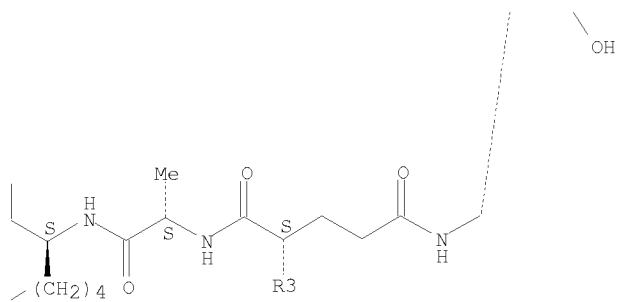
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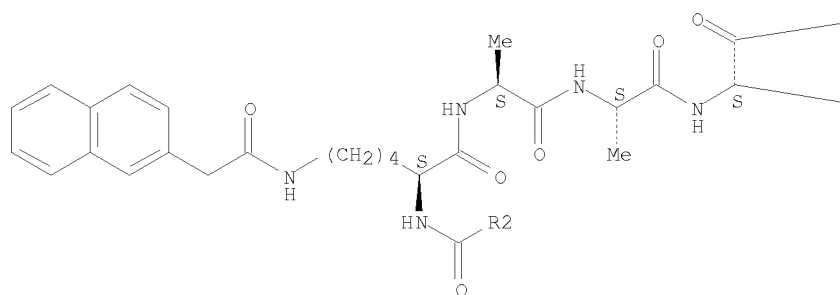


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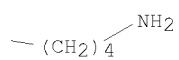
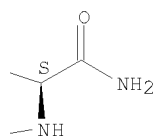


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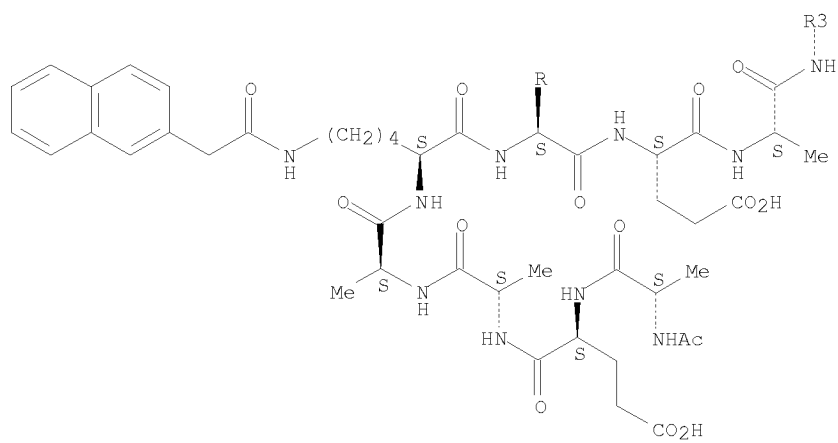
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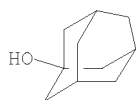


PAGE 5-A



CM 2

CRN 768-95-6  
CMF C10 H16 O



IT **289714-45-0P 289714-46-1P 289714-47-2P**

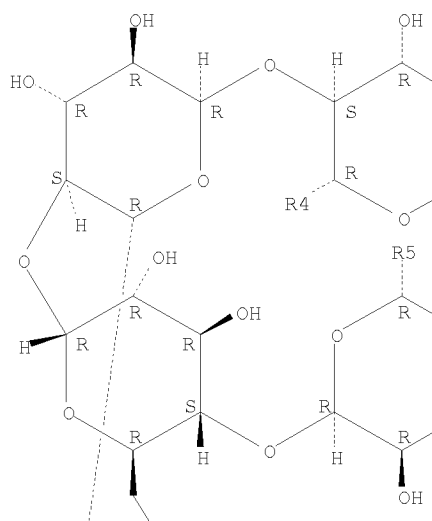
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(preparation, CD and fluorescence spectra of an  $\alpha$ -helical peptide bearing  $\gamma$ -cyclodextrin and naphthalene units)

RN 289714-45-0 CAPLUS

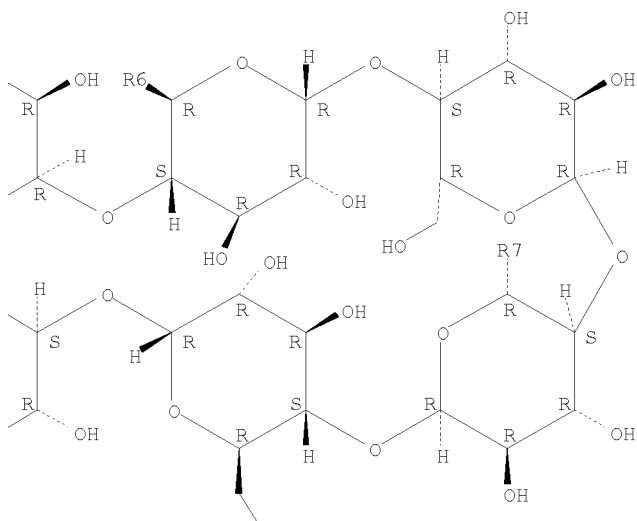
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-(2-naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

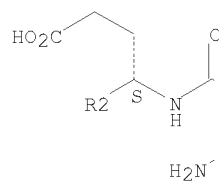
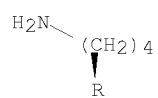
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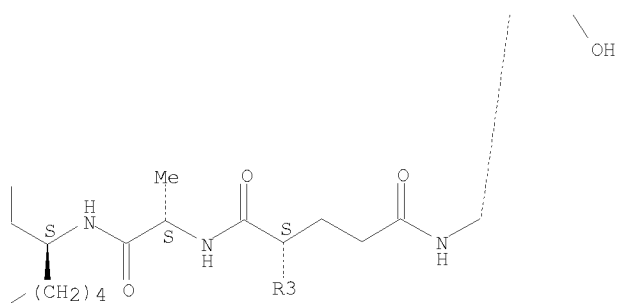
PAGE 1-C



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 $\text{H}_2\text{N}^+$ 

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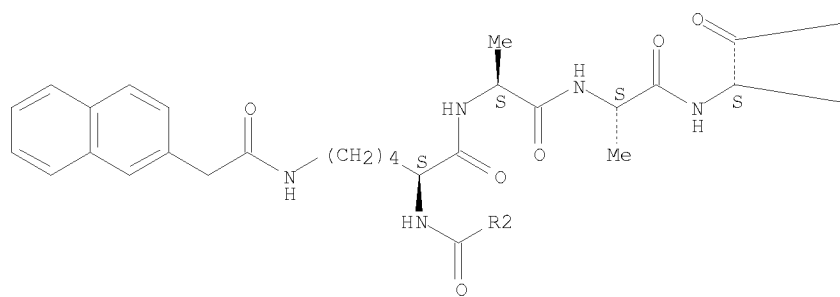


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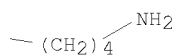
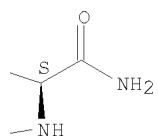


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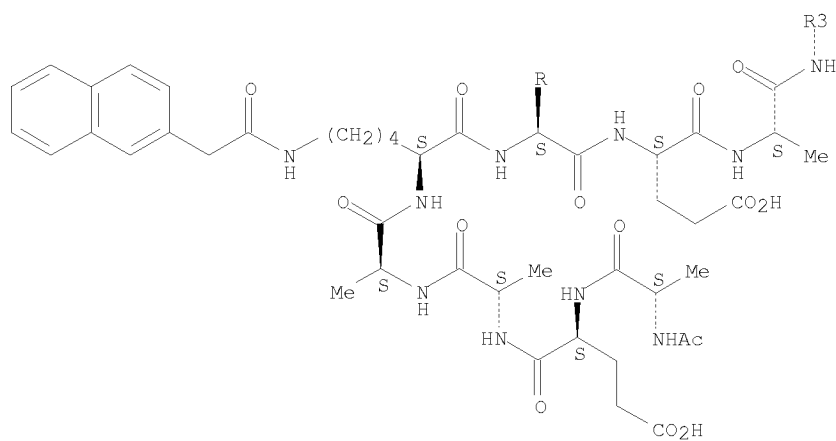
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RN 289714-46-1 CAPLUS

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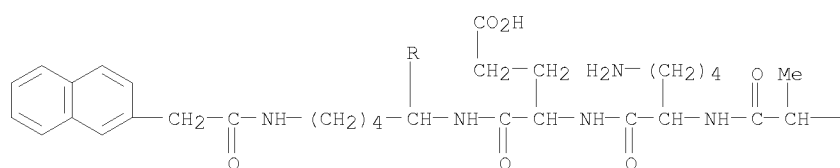
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RN 289714-47-2 CAPLUS

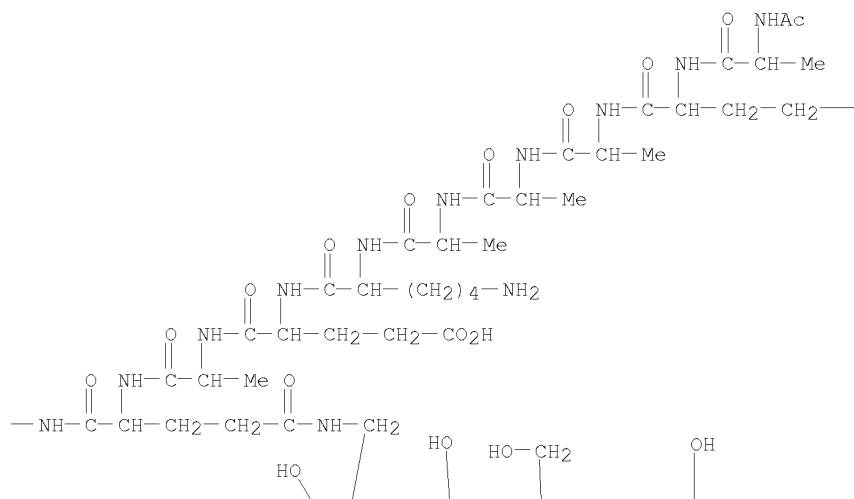
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naphthalenylacetyl)-L-lysyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX  
NAME)

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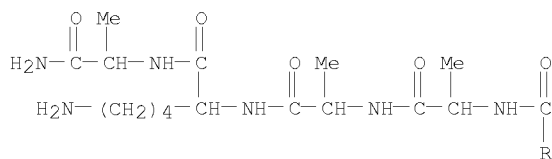
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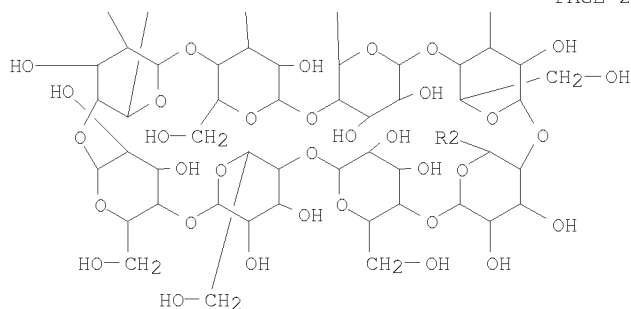
PAGE 1-C

—CO<sub>2</sub>H

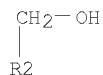
PAGE 2-A



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REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2000:358926 CAPLUS  
 DOCUMENT NUMBER: 133:164319  
 TITLE: Construction of  $\alpha$ -helix peptides with  $\beta$ -cyclodextrin and dansyl units and their conformational and molecular sensing properties  
 AUTHOR(S): Matsumura, Sachiko; Sakamoto, Seiji; Ueno, Akihiko; Mihara, Hisakazu  
 CORPORATE SOURCE: Department of Bioengineering Faculty of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan  
 SOURCE: Chemistry--A European Journal (2000), 6(10), 1781-1788 CODEN: CEUJED; ISSN: 0947-6539  
 PUBLISHER: Wiley-VCH Verlag GmbH  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB In order to apply de novo peptide design to mol. sensing, the authors designed and synthesized  $\alpha$ -helical peptides with  $\beta$ -

**cyclodextrin** ( $\beta$ -CDx) as a binding site and a dansyl unit (Dns) as a fluorescence sensing site. The conformational and mol. sensing properties of the peptides with  $\beta$ -CDx and Dns in various positions were investigated. CD and fluorescence measurements revealed that  $\beta$ -CDx and Dns form intramol. complexes which depend on their positions in the peptides. In the 17 residual peptides named EK3 and EK3R, in which  $\beta$ -CDx and Dns were introduced at the fourth and the eighth positions (EK3) or at the eighth and the fourth positions (EK3R), Dns was deeply included in the CDx cavity and formed a more stable self-inclusion complex with CDx than in the peptides EK6 and EK6R, in which these moieties were at the eighth and the fifteenth positions or at the fifteenth and the eighth positions, resp. The stability of the self-inclusion complex between  $\beta$ -CDx and Dns controlled the  $\alpha$ -helix structure as well as the binding and sensing abilities for the exogenous guests. These results demonstrate the usefulness of peptide tertiary structure for arranging CDx and other functional units, and suggest that this approach is important in the development of a new type of CDx-based sensory system.

IT 288145-23-3 288145-24-4 288145-25-5  
288145-26-6 288145-27-7 288145-28-8  
288145-29-9 288145-30-2 288145-31-3  
288145-32-4 288145-33-5 288145-34-6  
288145-35-7 288145-36-8 288145-37-9  
288145-38-0 288145-39-1 288145-40-4  
288145-41-5 288145-42-6 288145-43-7  
288145-44-8

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(mol.-recognition properties of  $\alpha$ -helical peptides containing  $\beta$ -**cyclodextrin** and dansyl units)

RN 288145-23-3 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

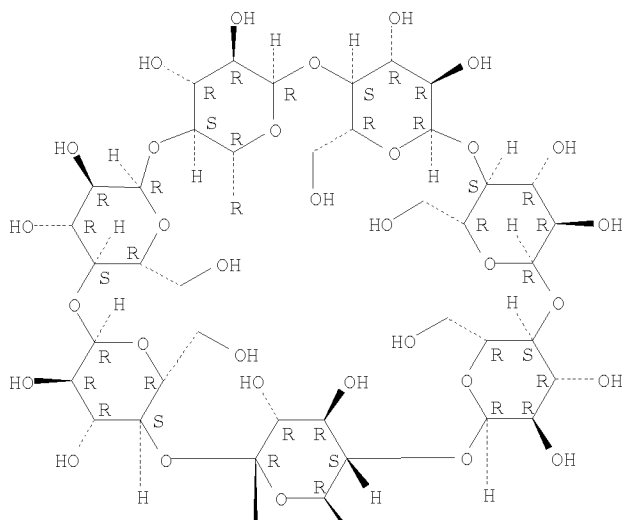
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CRN 288145-18-6

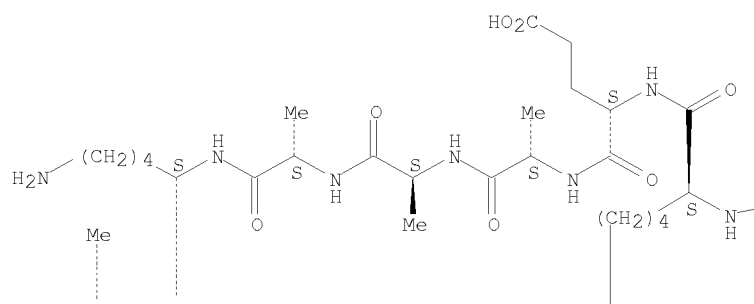
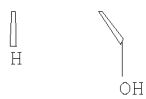
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

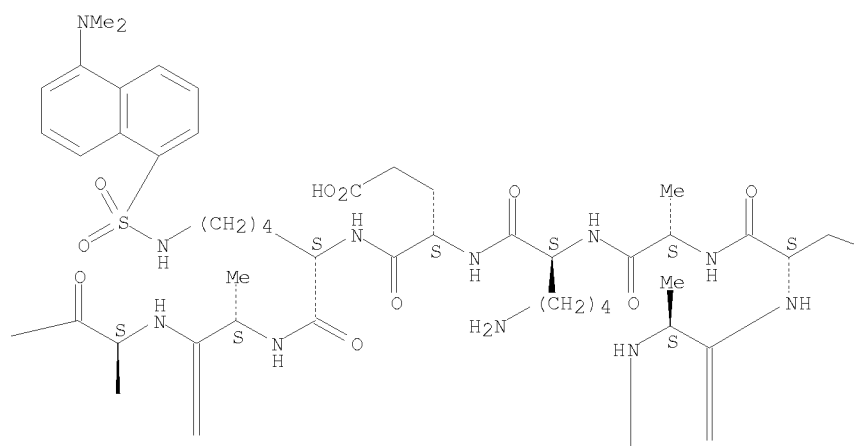
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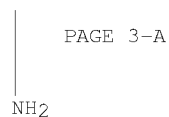
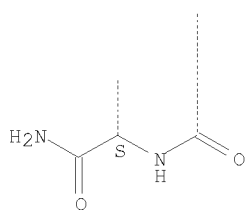
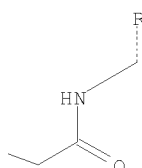
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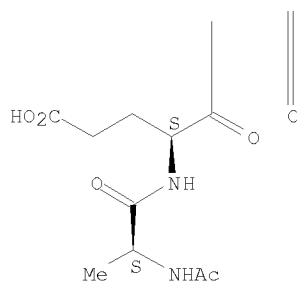
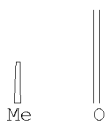
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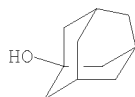


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CM 2

CRN 768-95-6  
CMF C10 H16 O



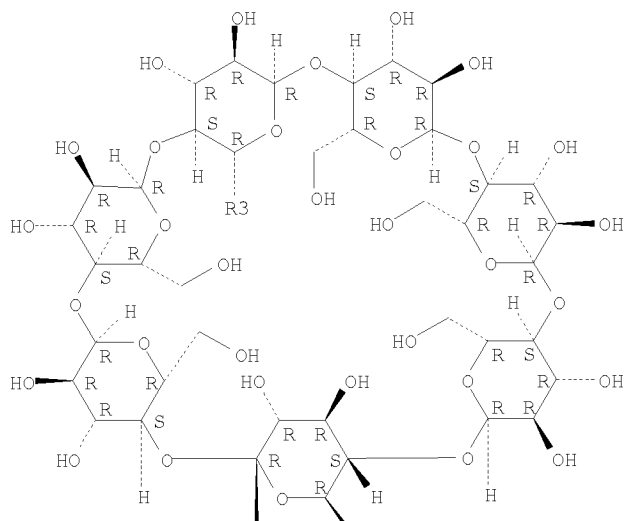
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CM 1

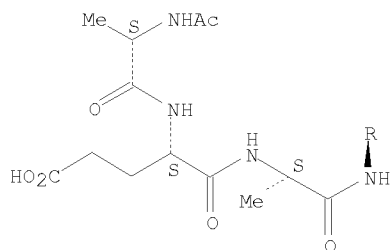
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Absolute stereochemistry.

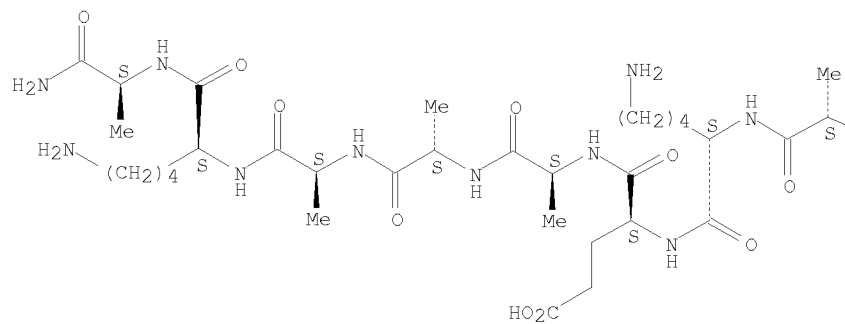
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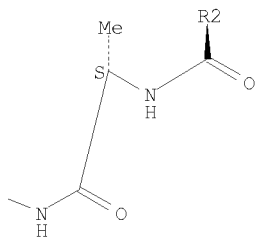
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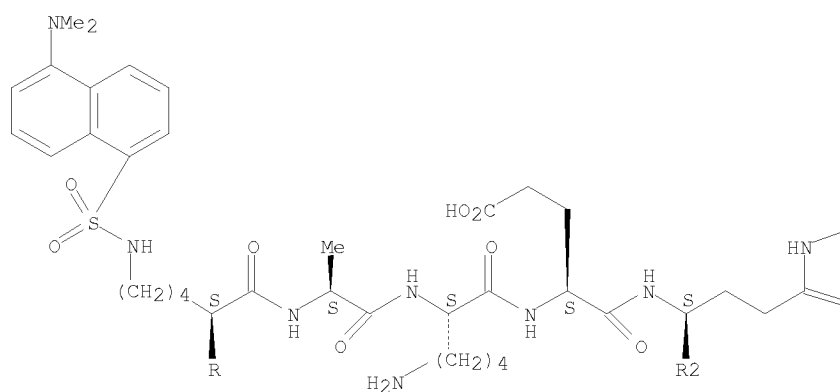
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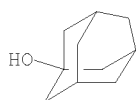
PAGE 4-B



CM 2

CRN 768-95-6

CMF C10 H16 O



RN 288145-25-5 CAPLUS

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10576346

N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-, compd.  
with tricyclo[3.3.1.1<sup>3,7</sup>]decan-1-ol (1:1) (9CI) (CA INDEX NAME)

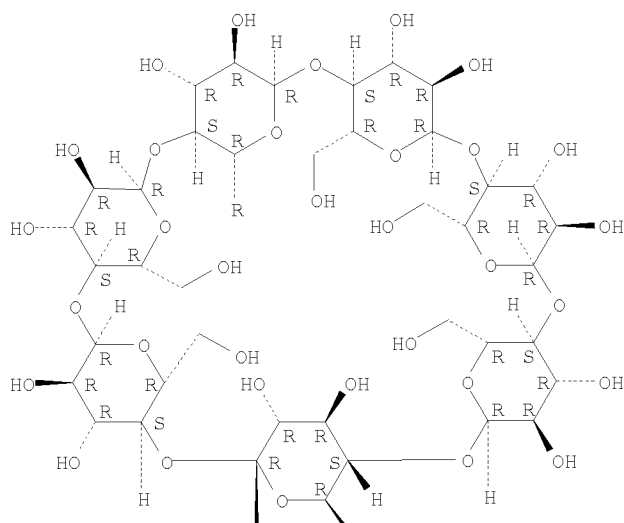
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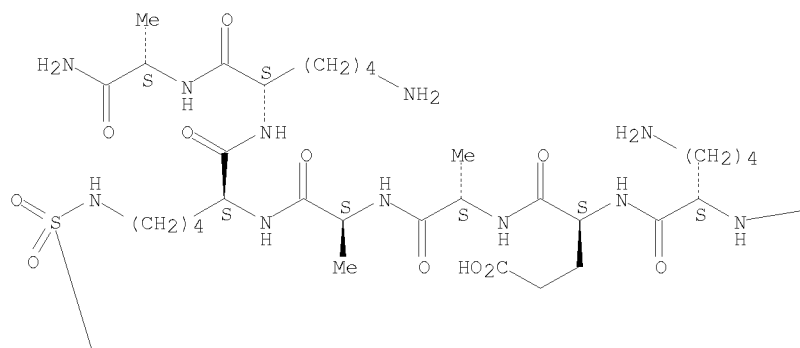
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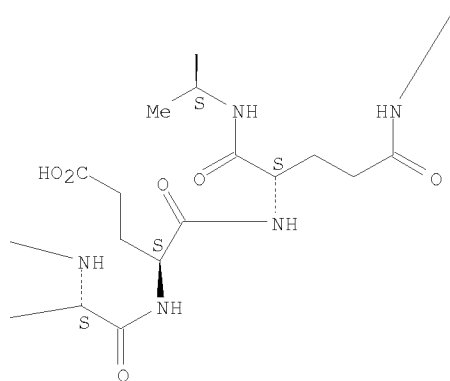
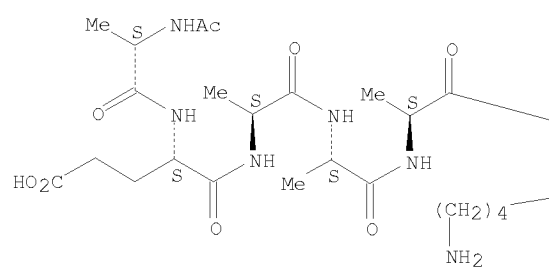
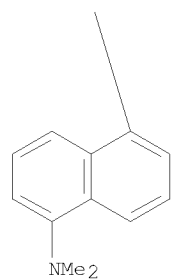
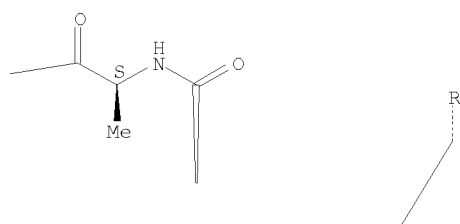
Absolute stereochemistry.

PAGE 1-A

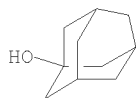


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CRN 768-95-6  
 CME C10 H16 O



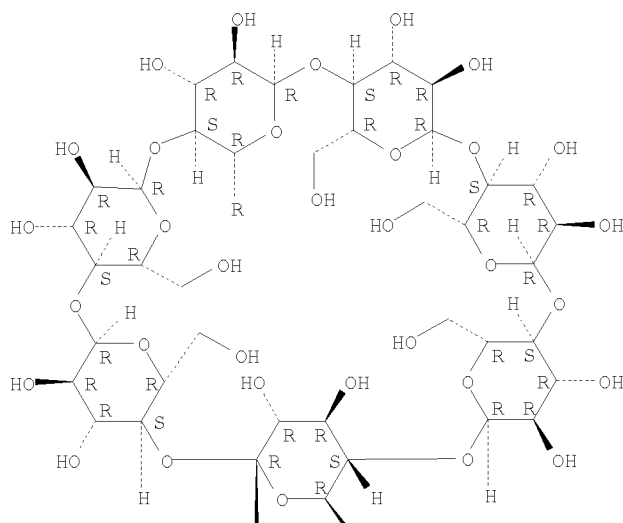
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CRN 288145-21-1  
 CME C127 H206 N24 O61 S

Absolute stereochemistry.

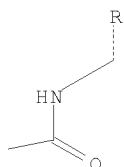
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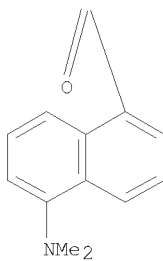
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

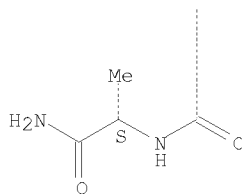
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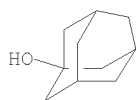
PAGE 3-B



CM 2

CRN 768-95-6

CMF C10 H16 O



RN 288145-27-7 CAPLUS

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CM 1

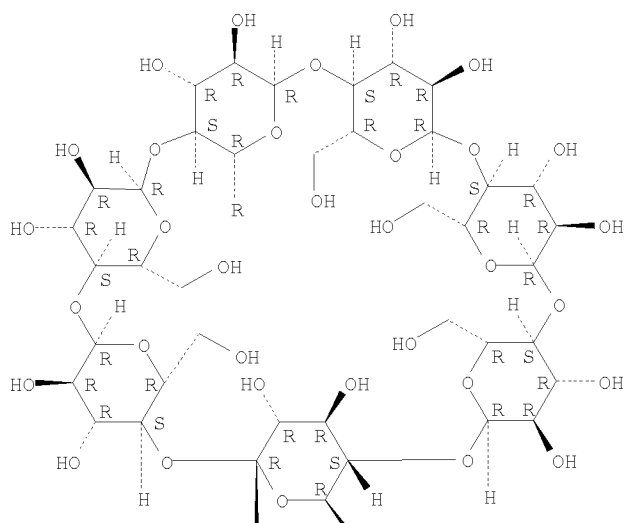
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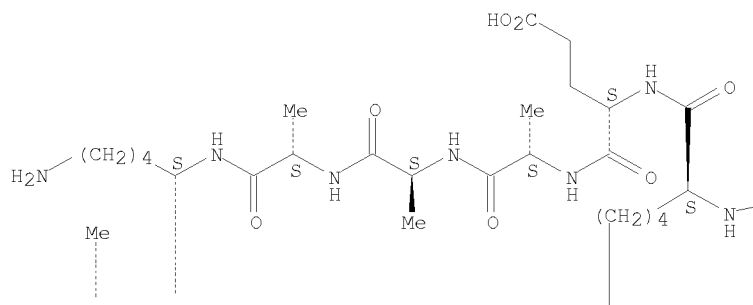
CMF C127 H206 N24 O61 S

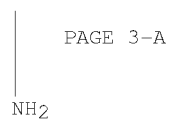
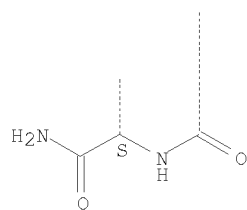
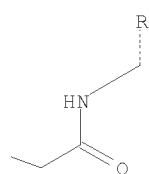
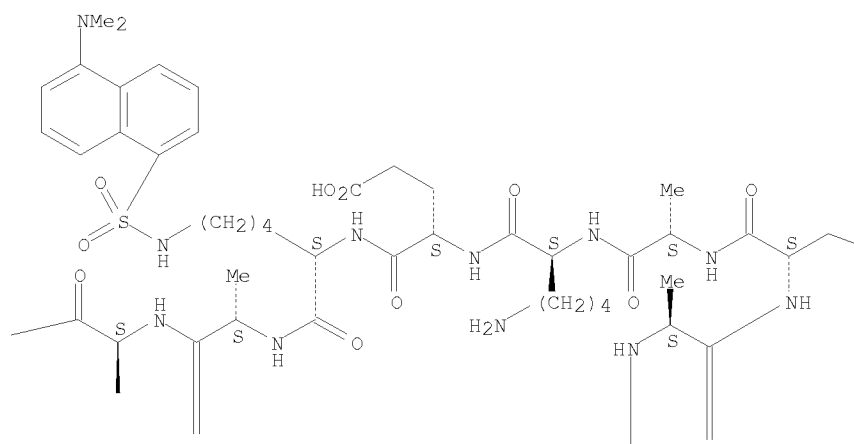
Absolute stereochemistry.

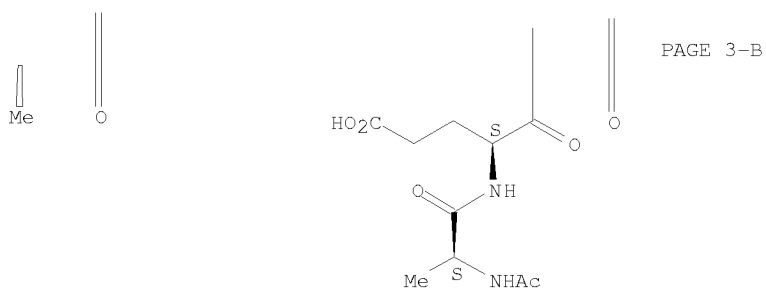
PAGE 1-A



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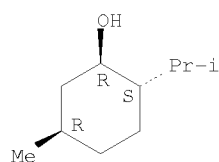


CM 2

CRN 2216-51-5

CMF C10 H20 O

Absolute stereochemistry. Rotation (-).



RN 288145-28-8 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

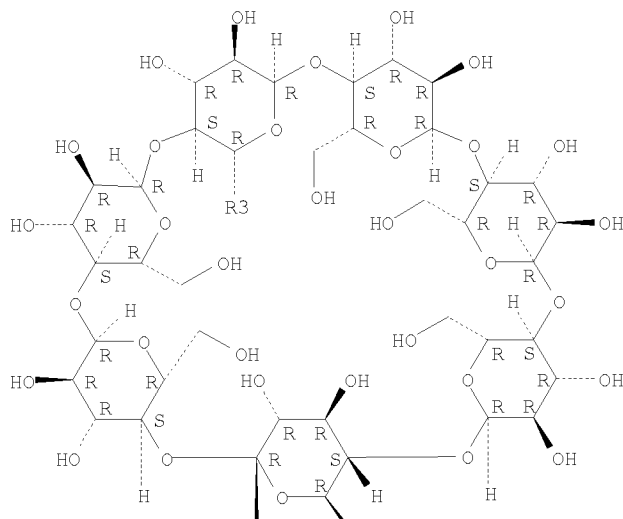
CM 1

CRN 288145-19-7

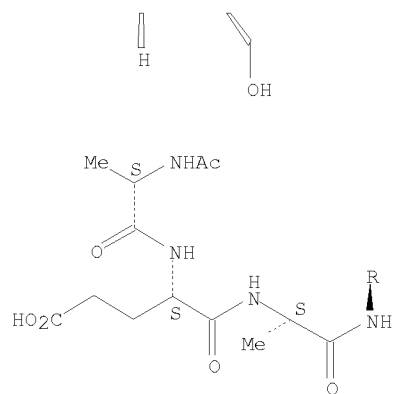
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

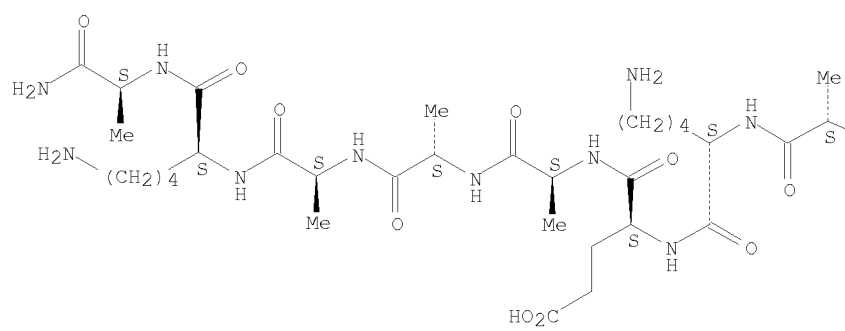
PAGE 1-A



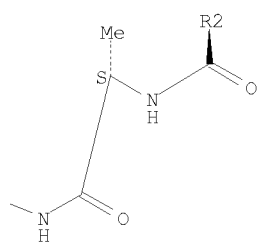
PAGE 2-A

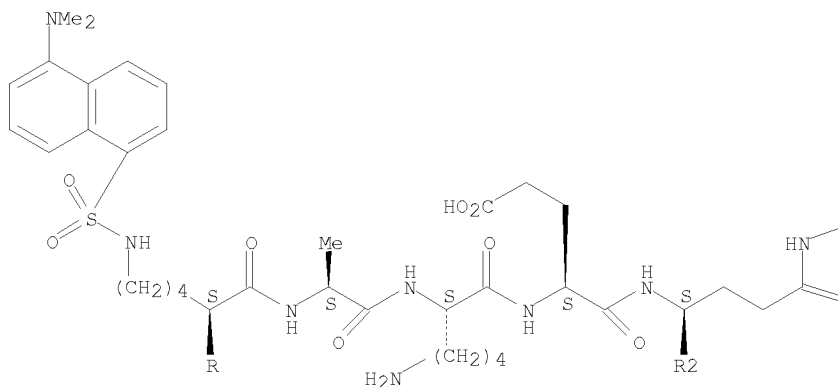


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PAGE 3-B



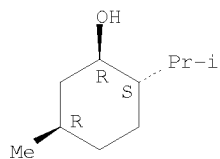


CM 2

CRN 2216-51-5

CMF C10 H20 O

Absolute stereochemistry. Rotation (-).



RN 288145-29-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-, compd. with (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

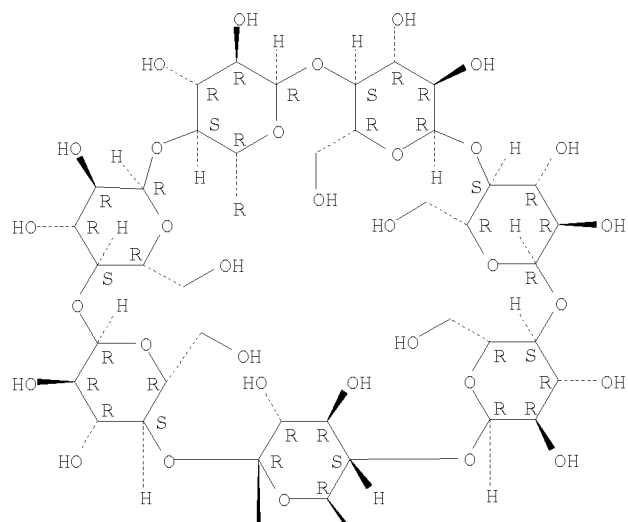
CM 1

CRN 288145-20-0

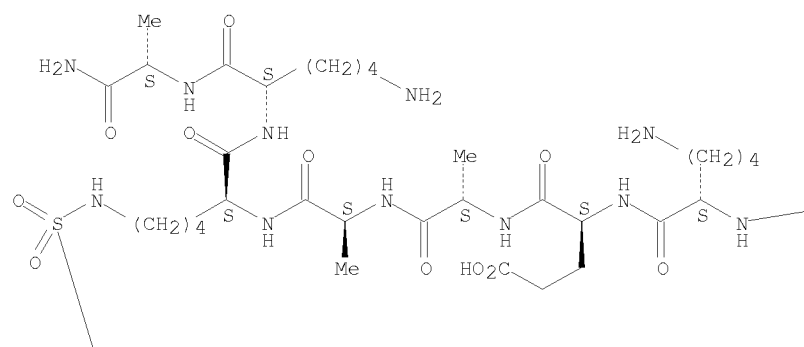
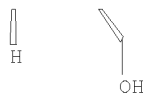
CMF C127 H206 N24 O61 S

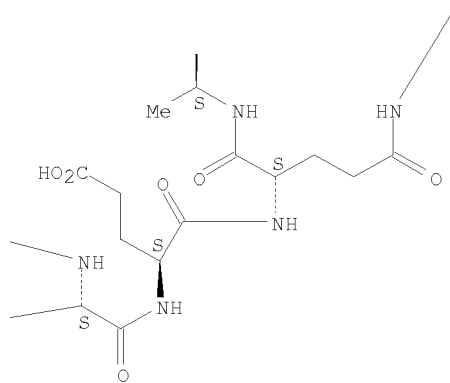
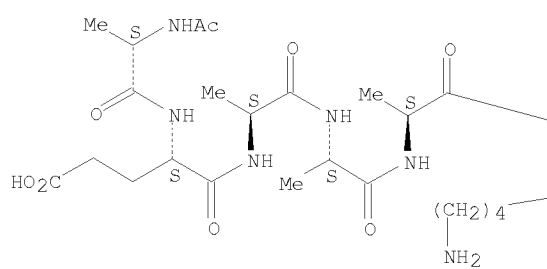
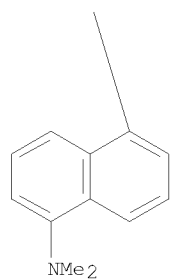
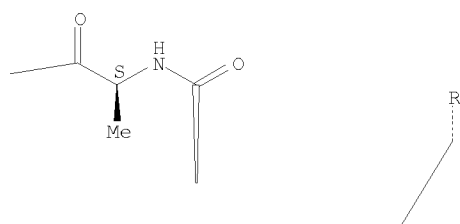
Absolute stereochemistry.

PAGE 1-A



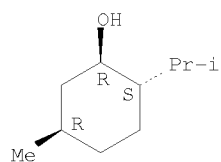
PAGE 2-A





CRN 2216-51-5  
 CME C10 H20 O

Absolute stereochemistry. Rotation (-).



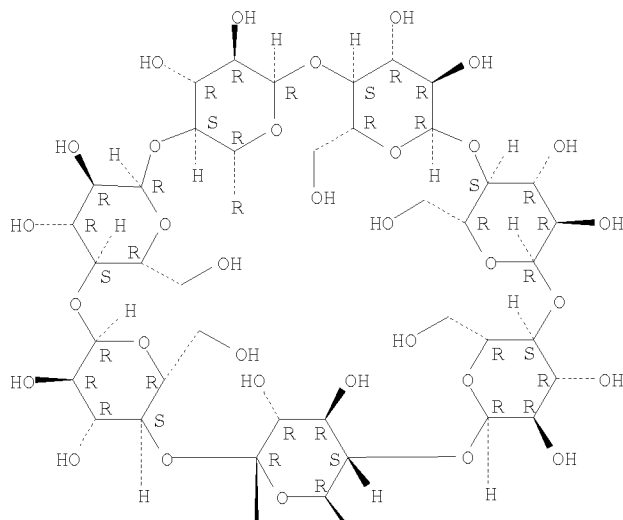
RN 288145-30-2 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-, compd. with (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 288145-21-1  
 CME C127 H206 N24 O61 S

Absolute stereochemistry.

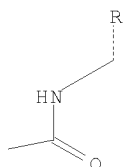
PAGE 1-A



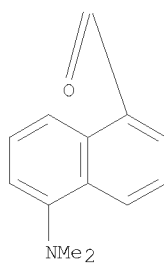
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

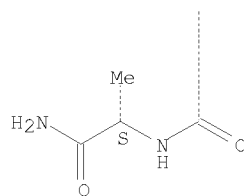
PAGE 2-C



PAGE 3-A



PAGE 3-B

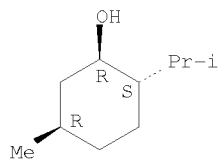


CM 2

CRN 2216-51-5

CMF C10 H20 O

Absolute stereochemistry. Rotation (-).



RN 288145-31-3 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with (1S,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

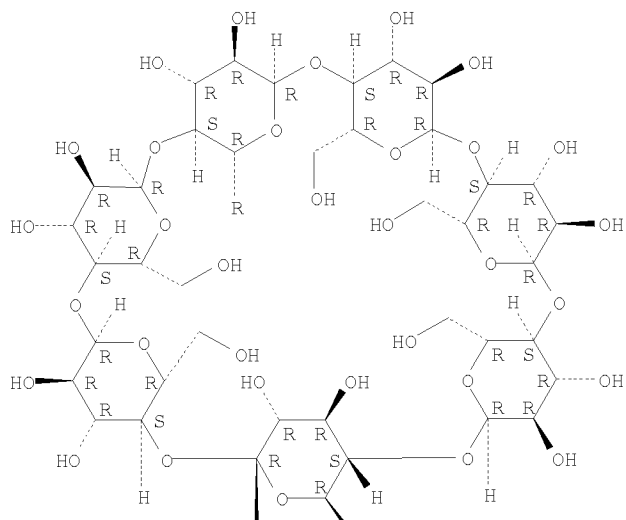
CM 1

CRN 288145-18-6

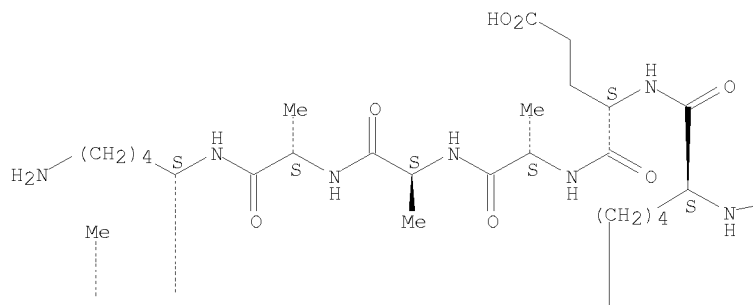
CMF C127 H206 N24 O61 S

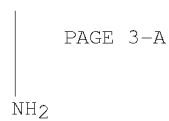
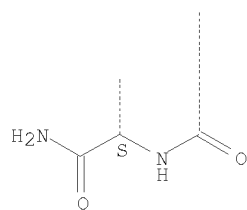
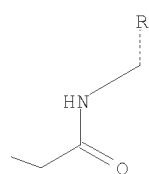
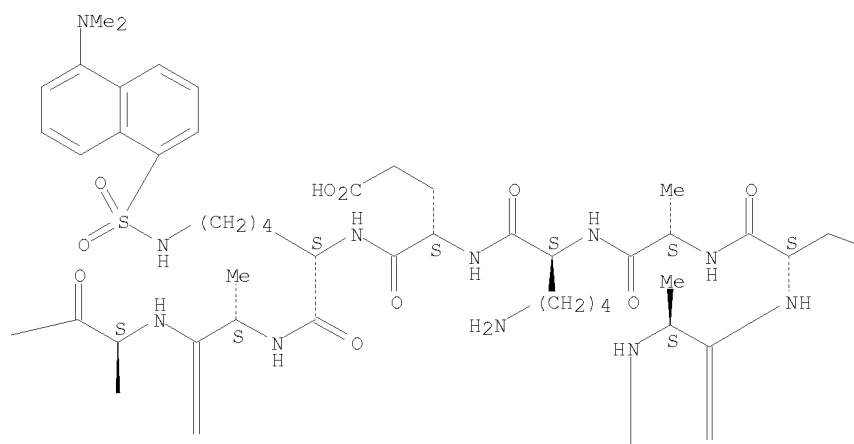
Absolute stereochemistry.

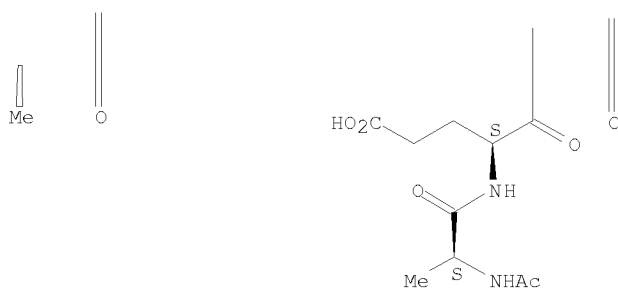
PAGE 1-A



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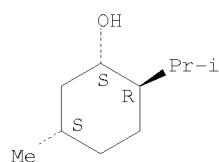
PAGE 3-B

CM 2

CRN 15356-60-2

CMF C10 H20 O

Absolute stereochemistry. Rotation (+).



RN 288145-32-4 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-, compd. with (1S,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

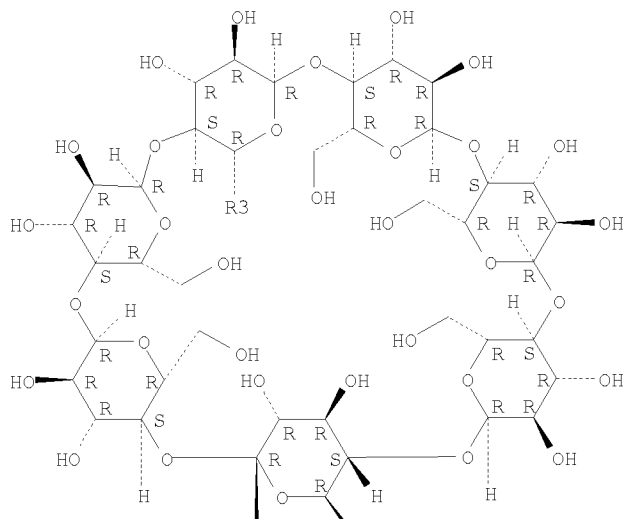
CM 1

CRN 288145-19-7

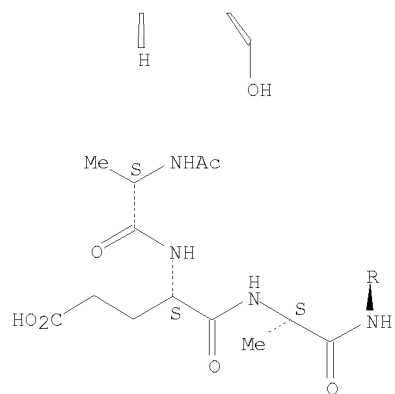
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

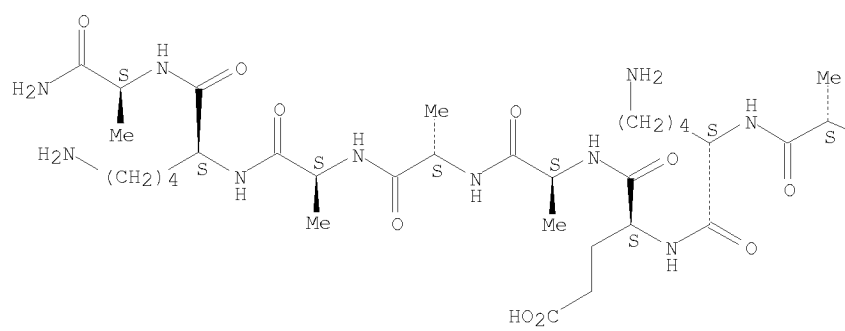
PAGE 1-A



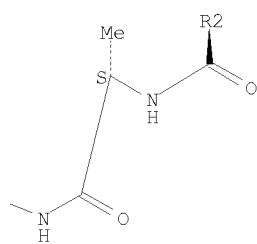
PAGE 2-A

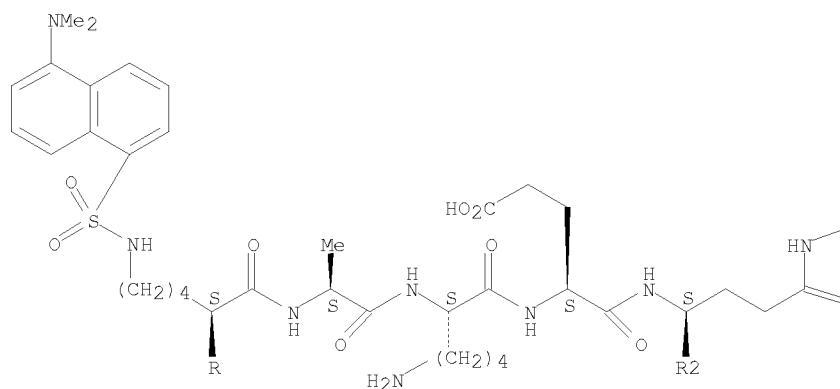


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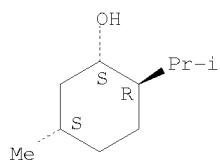


CM 2

CRN 15356-60-2

CMF C10 H20 O

Absolute stereochemistry. Rotation (+).



RN 288145-33-5 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-, compd. with (1S,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

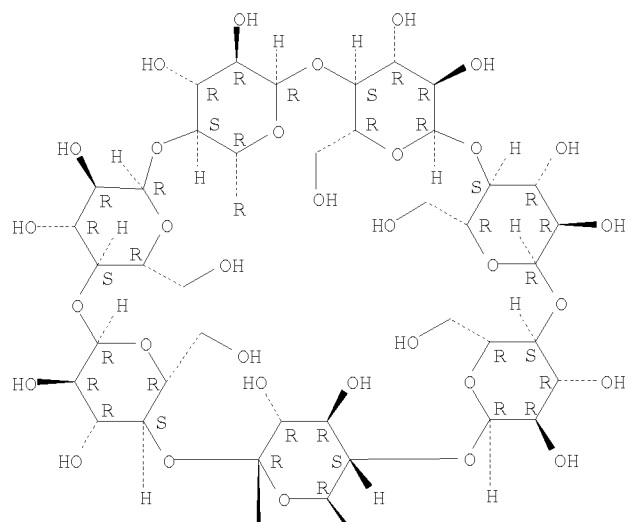
CM 1

CRN 288145-20-0

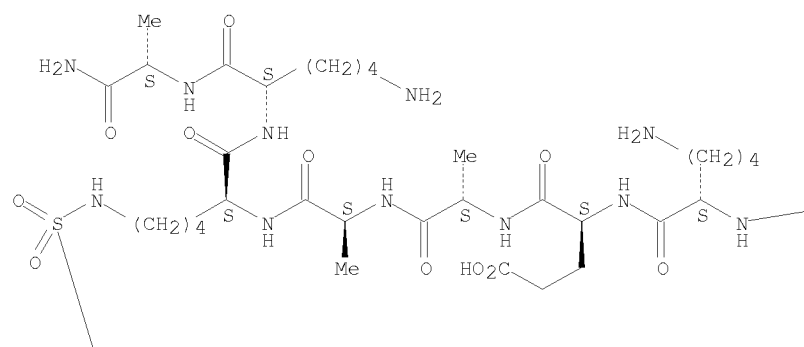
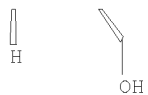
CMF C127 H206 N24 O61 S

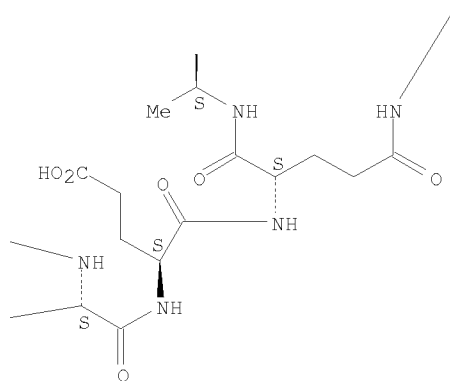
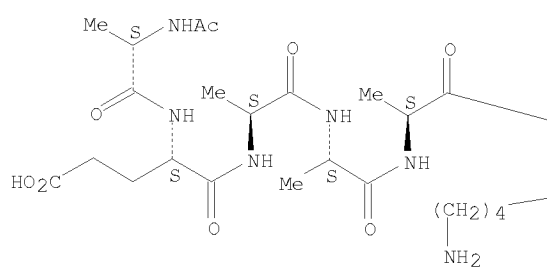
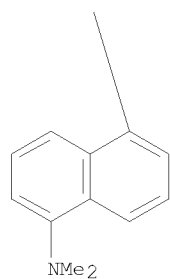
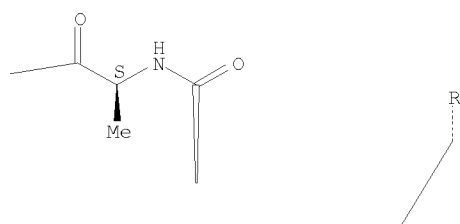
Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

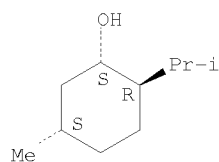




10576346

CRN 15356-60-2  
CMF C10 H20 O

Absolute stereochemistry. Rotation (+).



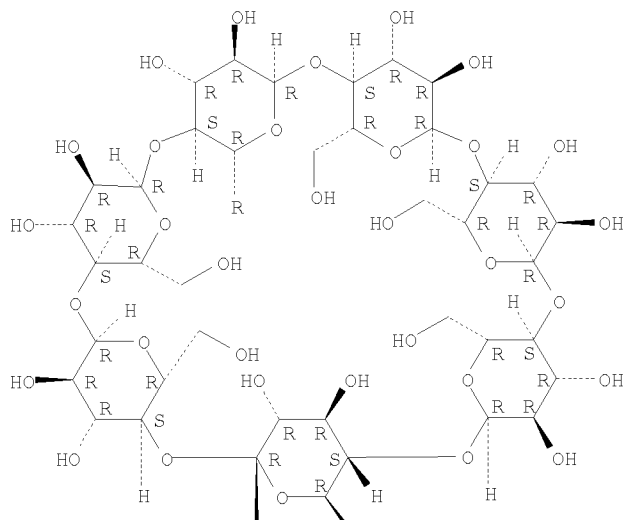
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CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminyl-L-lysyl-, compd. with (1S,2R,5S)-5-methyl-2-(1-methylethyl)cyclohexanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 288145-21-1  
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

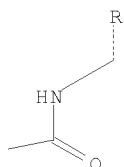
PAGE 1-A



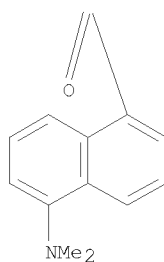
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

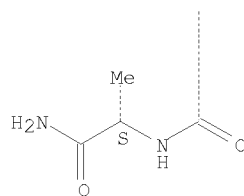
PAGE 2-C



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PAGE 3-B

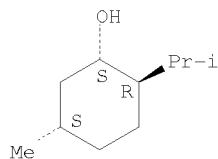


CM 2

CRN 15356-60-2

CMF C10 H20 O

Absolute stereochemistry. Rotation (+).



RN 288145-35-7 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -  
 cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-  
 [[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-  
 lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide  
 (1:1) (9CI) (CA INDEX NAME)

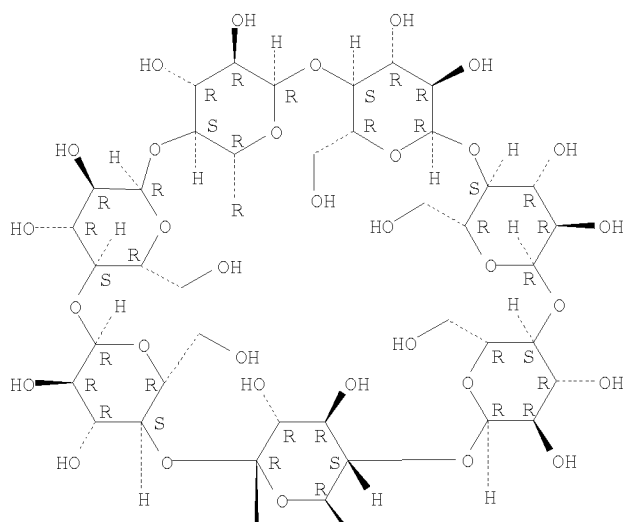
CM 1

CRN 288145-18-6

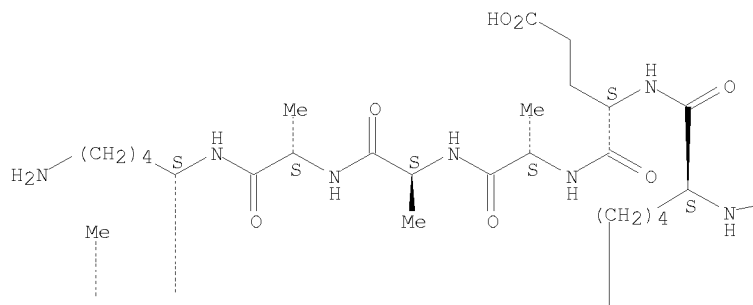
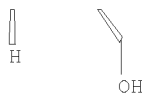
CMF C127 H206 N24 O61 S

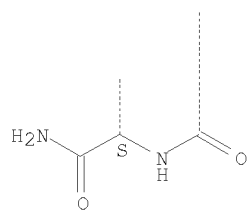
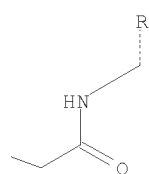
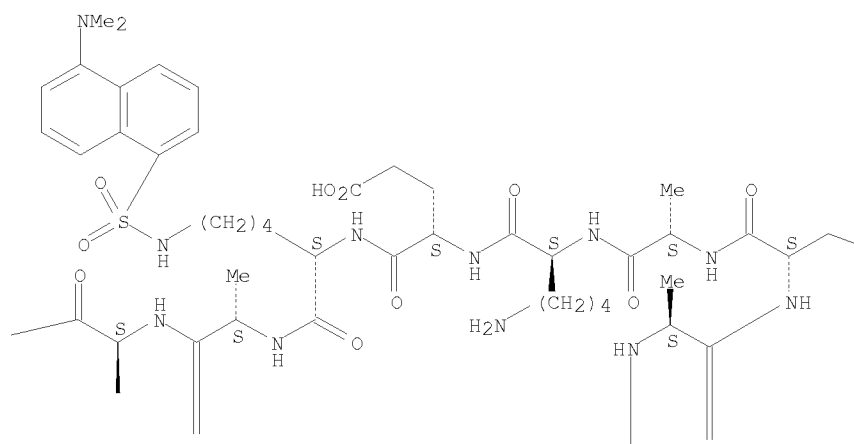
Absolute stereochemistry.

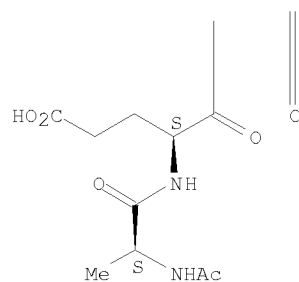
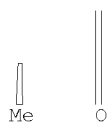
PAGE 1-A



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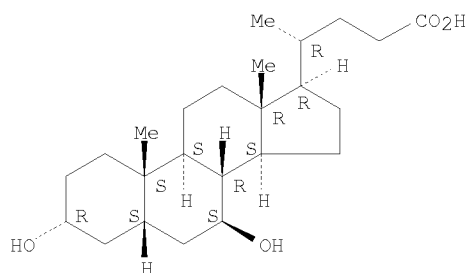
PAGE 3-B

CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-36-8 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[[5-(dimethylamino)-  
 1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L-  
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 (9CI) (CA INDEX NAME)

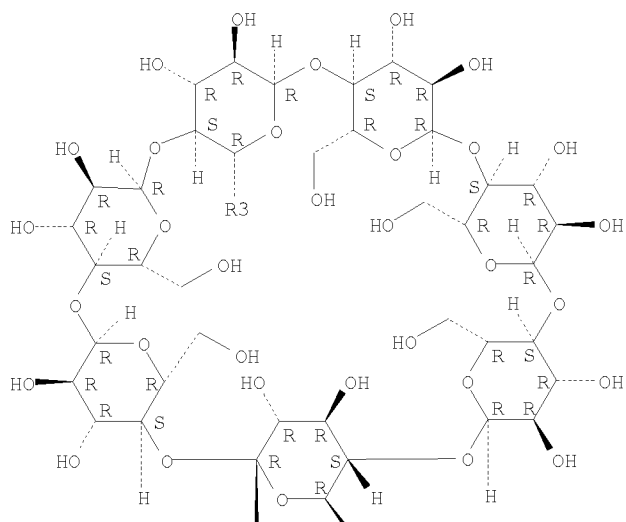
CM 1

CRN 288145-19-7

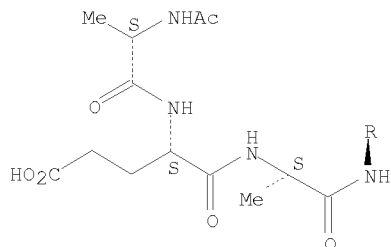
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

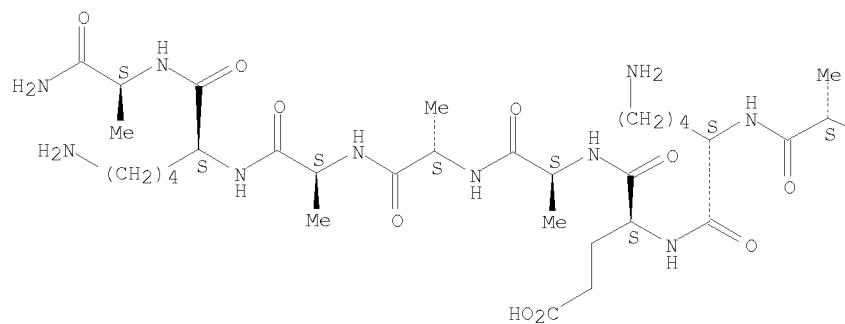
PAGE 1-A



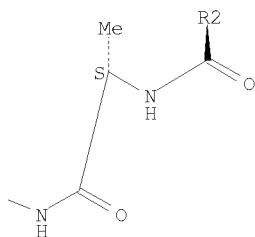
PAGE 2-A



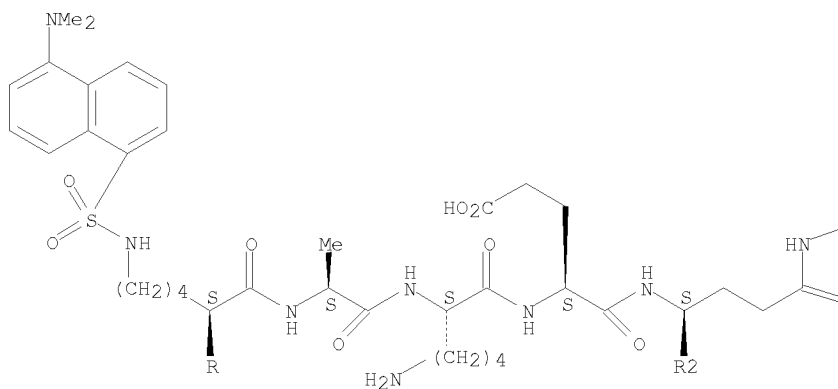
PAGE 3-A



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PAGE 4-A



PAGE 4-B

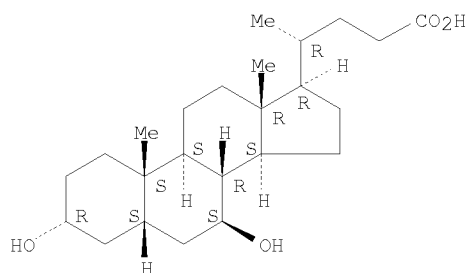


CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-37-9 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-  
glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-  
N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-L-  
alaninamide (1:1) (9CI) (CA INDEX NAME)

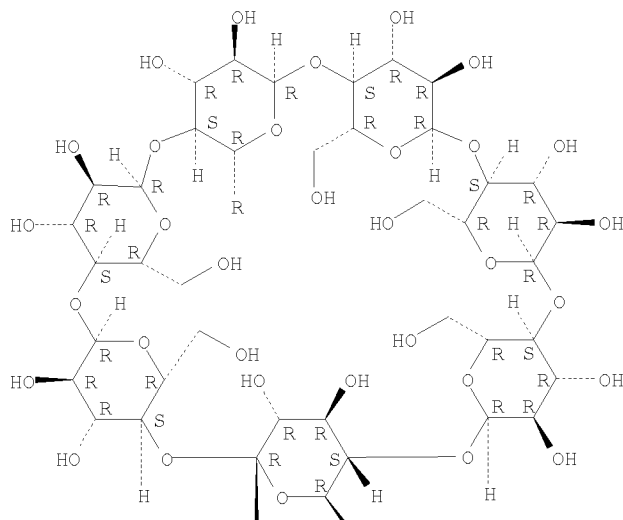
CM 1

CRN 288145-20-0

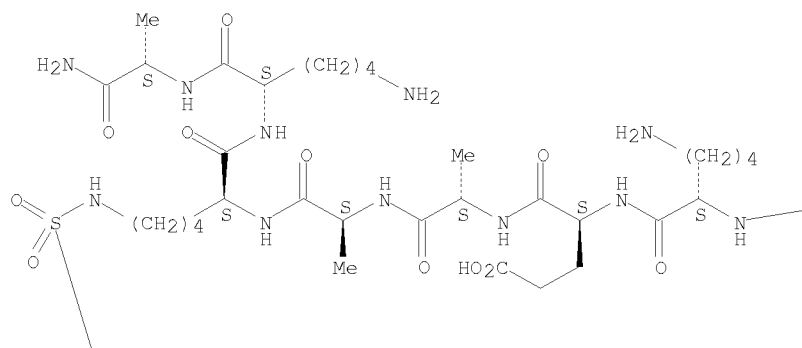
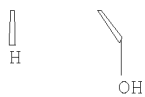
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

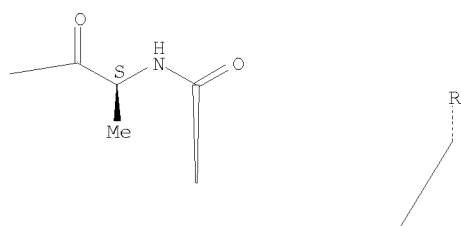
PAGE 1-A

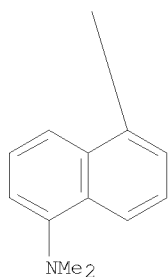


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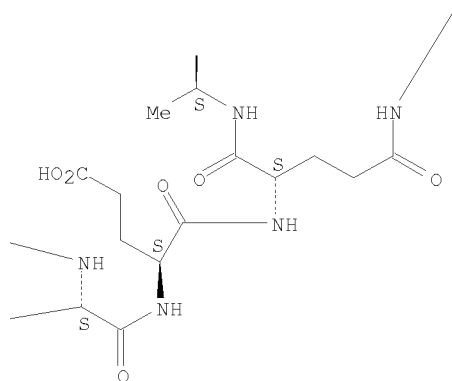
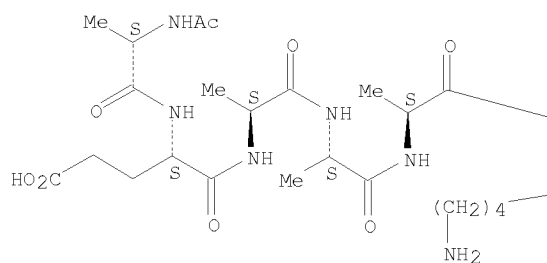


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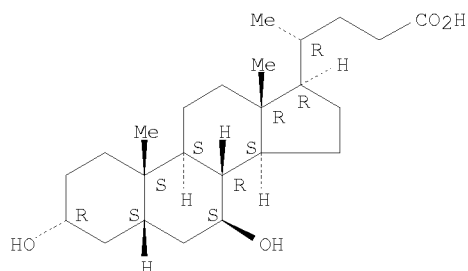
PAGE 3-B

CM 2

CRN 128-13-2

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-38-0 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\beta$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
 lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-  
 lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L-alaninamide (1:1)  
 (9CI) (CA INDEX NAME)

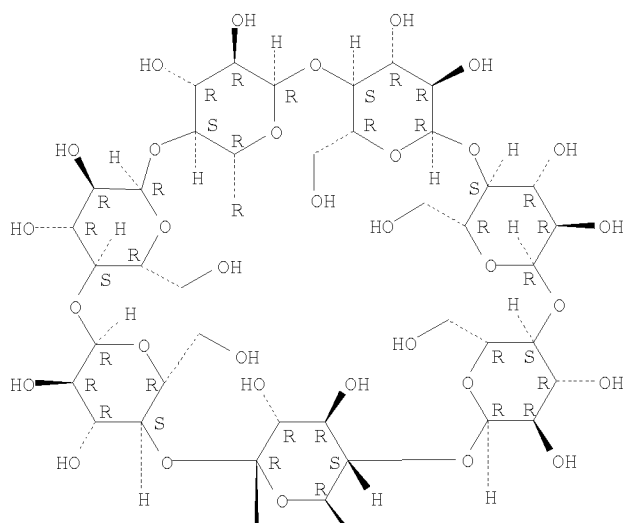
CM 1

CRN 288145-21-1

CMF C127 H206 N24 O61 S

Absolute stereochemistry.

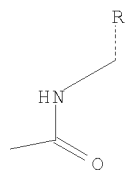
PAGE 1-A



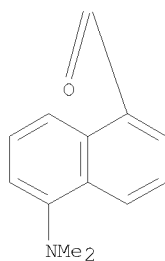
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

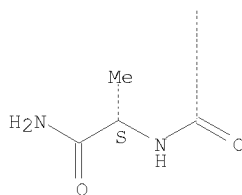
PAGE 2-C



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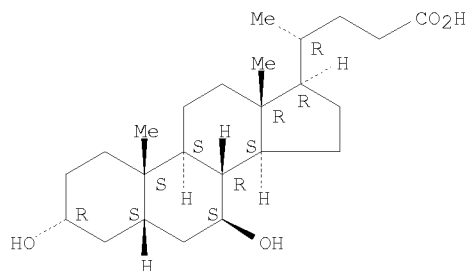
PAGE 3-B



CM 2

CRN 128-13-2  
CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-39-1 CAPLUS

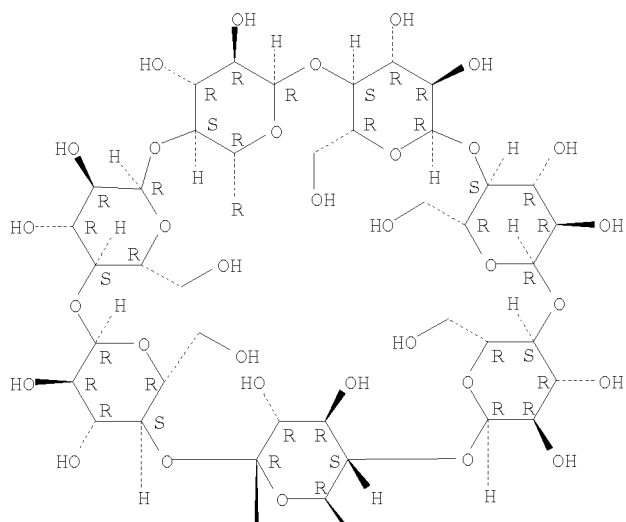
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -  
cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-  
[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-  
lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-alaninamide  
(1:1) (9CI) (CA INDEX NAME)

CM 1

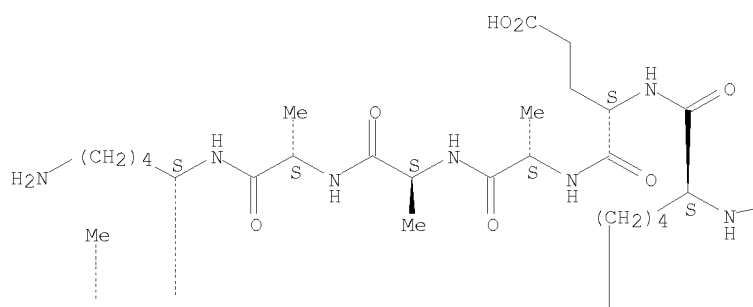
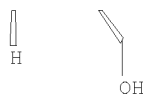
CRN 288145-18-6  
CMF C127 H206 N24 O61 S

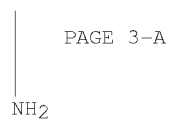
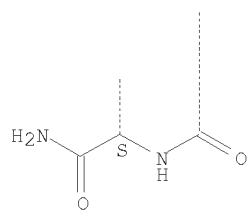
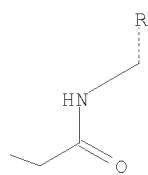
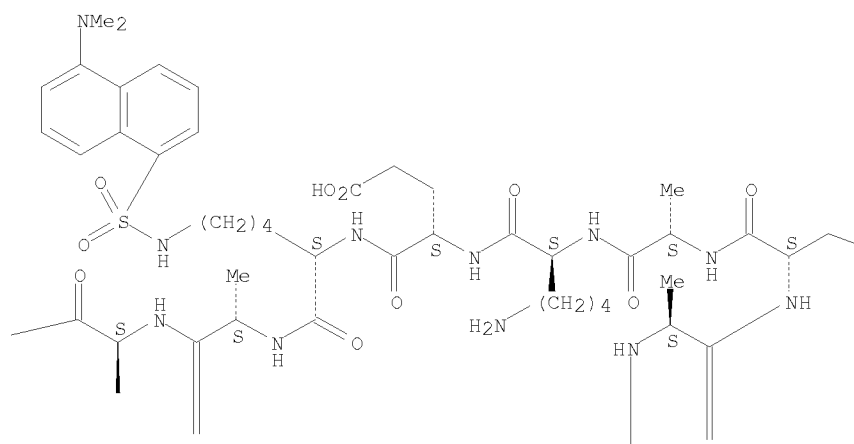
Absolute stereochemistry.

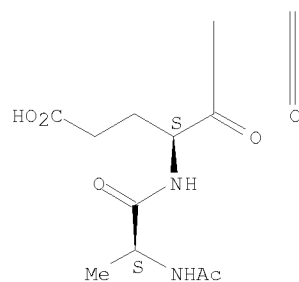
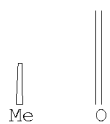
PAGE 1-A



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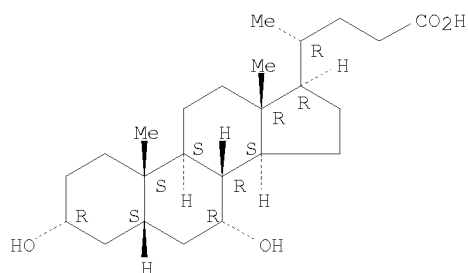
PAGE 3-B

CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-40-4 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[[5-(dimethylamino)-  
 1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L-  
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 (9CI) (CA INDEX NAME)

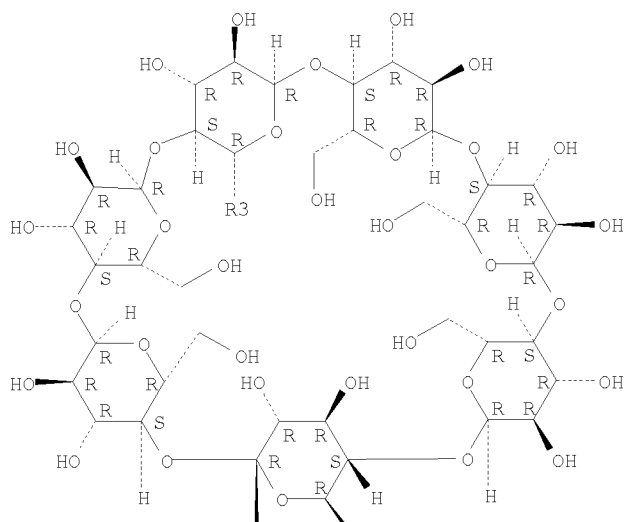
CM 1

CRN 288145-19-7

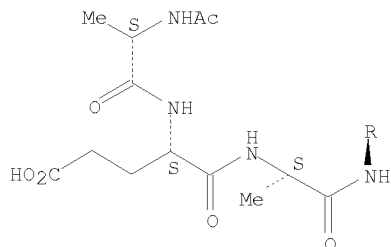
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

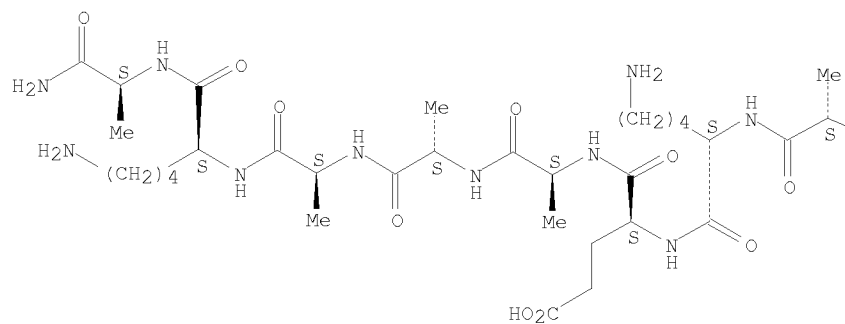
PAGE 1-A



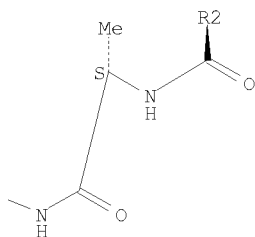
PAGE 2-A



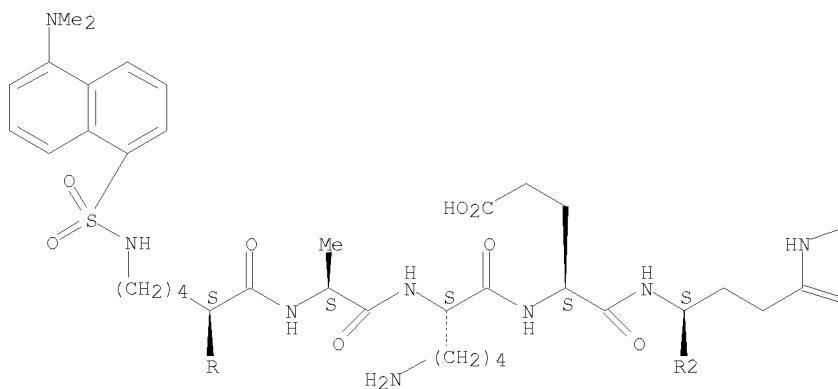
PAGE 3-A



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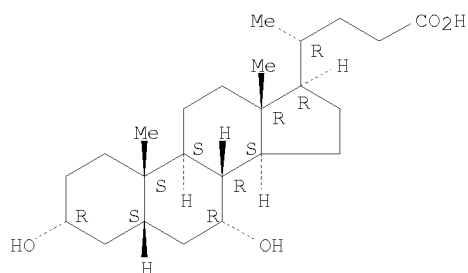


CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-41-5 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-  
glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-  
N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-L-  
alaninamide (1:1) (9CI) (CA INDEX NAME)

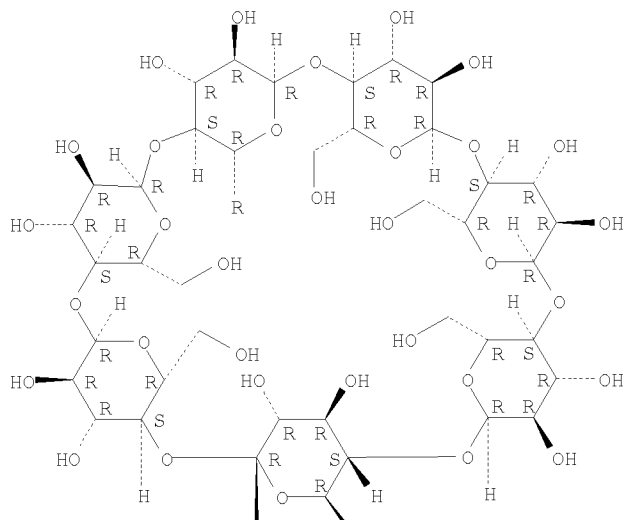
CM 1

CRN 288145-20-0

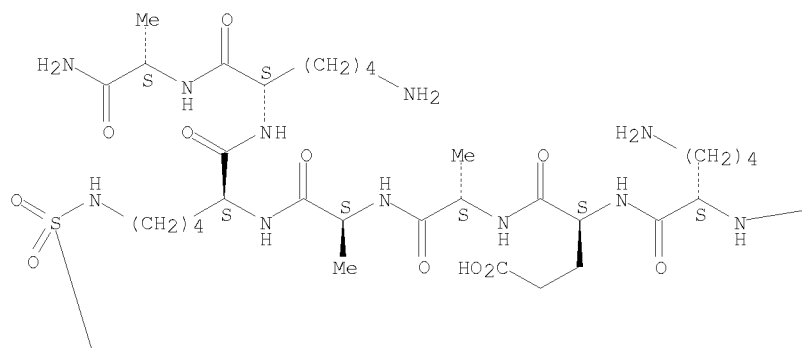
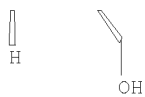
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

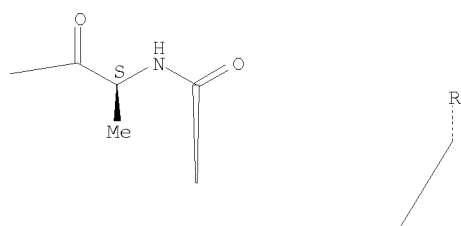
PAGE 1-A

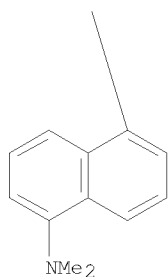


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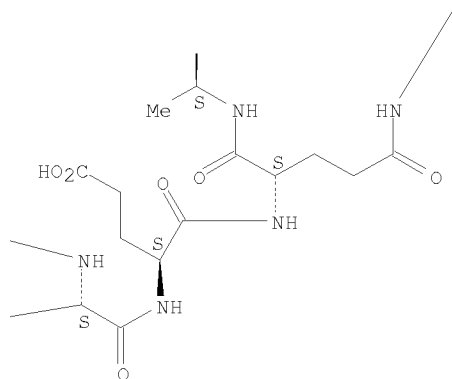
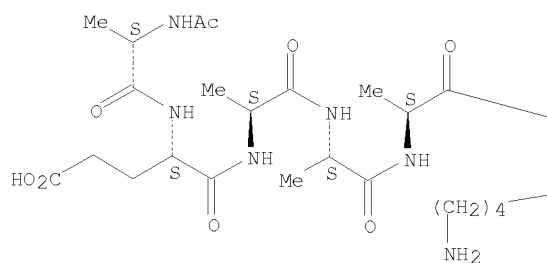


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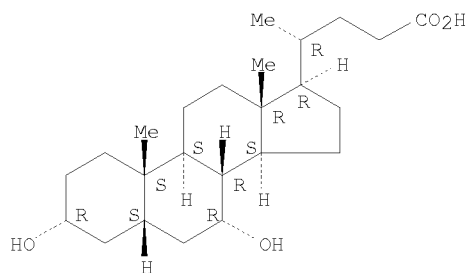
PAGE 3-B

CM 2

CRN 474-25-9

CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-42-6 CAPLUS

CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ )-, compd.  
 with N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-  
 lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-  
 lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-  
 deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L-alaninamide (1:1)  
 (9CI) (CA INDEX NAME)

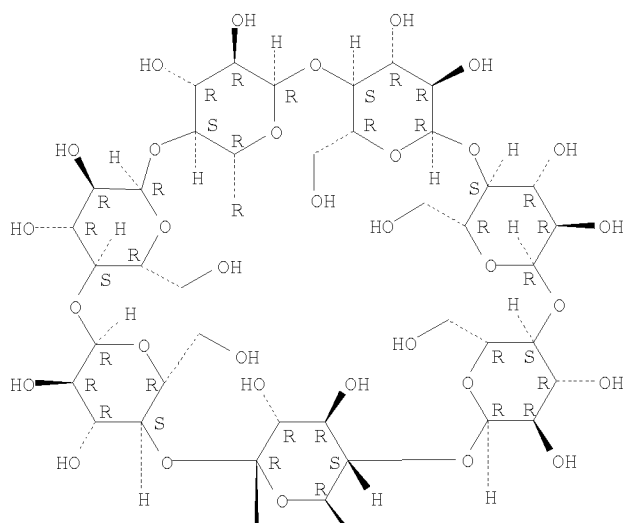
CM 1

CRN 288145-21-1

CMF C127 H206 N24 O61 S

Absolute stereochemistry.

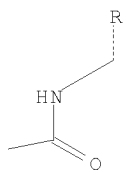
PAGE 1-A



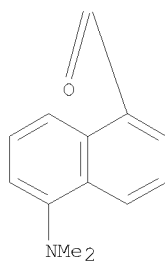
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

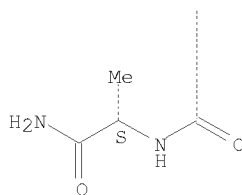
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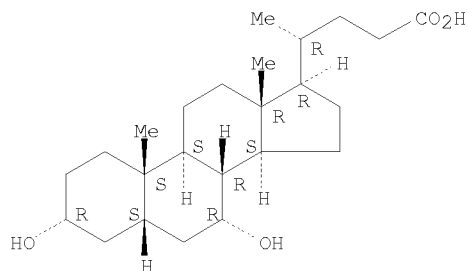
PAGE 3-B



CM 2

CRN 474-25-9  
CMF C24 H40 O4

Absolute stereochemistry.



RN 288145-43-7 CAPLUS

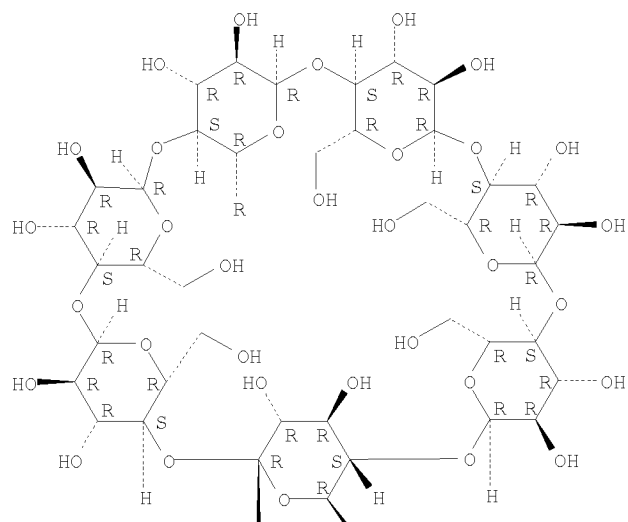
CN Cholan-24-oic acid, 3,7,12-trihydroxy-,  
(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-, compd. with  
N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-  
 $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-  
alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[[5-  
(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-lysyl-L-alaninamide  
(1:1) (9CI) (CA INDEX NAME)

CM 1

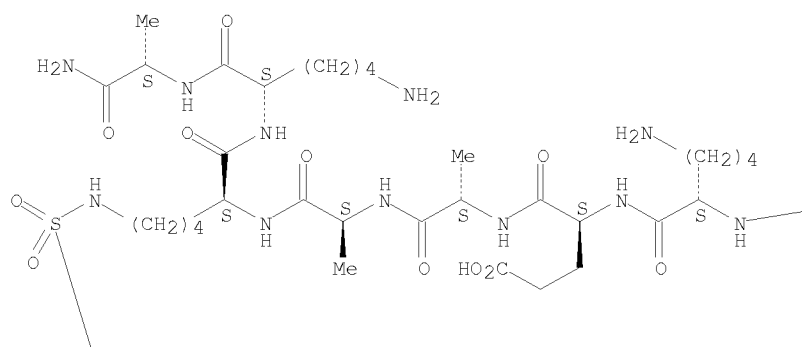
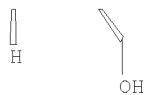
CRN 288145-20-0  
CMF C127 H206 N24 O61 S

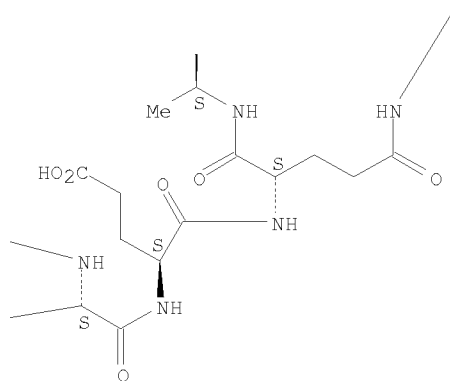
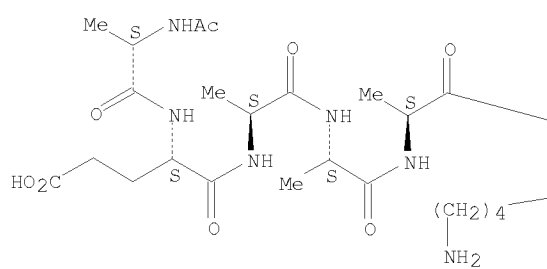
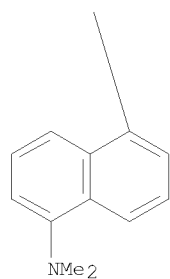
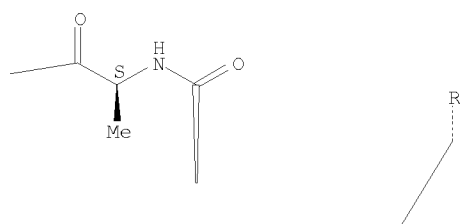
Absolute stereochemistry.

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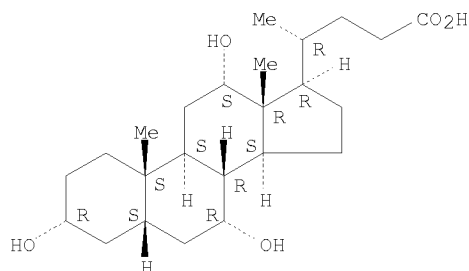
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CRN 81-25-4  
CMF C24 H40 O5

Absolute stereochemistry.



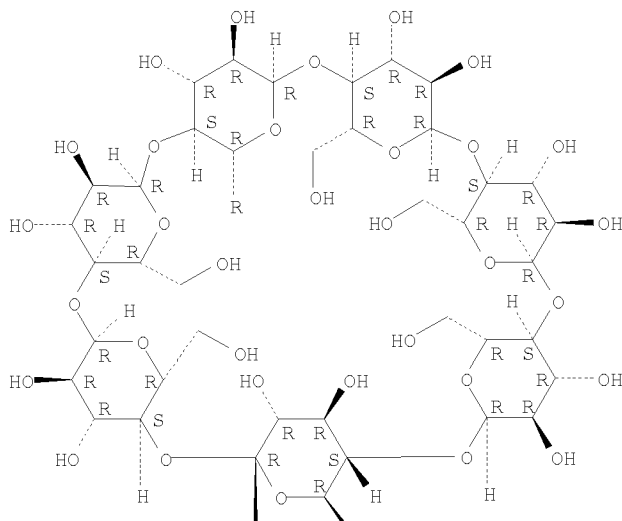
RN 288145-44-8 CAPLUS  
CN Cholan-24-oic acid, 3,7,12-trihydroxy-,  
(3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-, compd. with  
N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl-L-alaninamide (1:1) (9CI)  
(CA INDEX NAME)

CM 1

CRN 288145-21-1  
CMF C127 H206 N24 O61 S

Absolute stereochemistry.

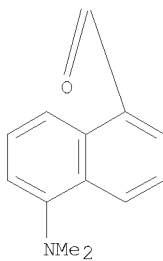
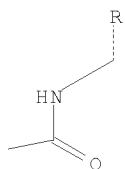
PAGE 1-A



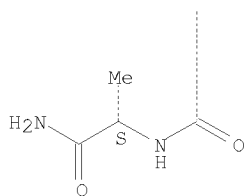
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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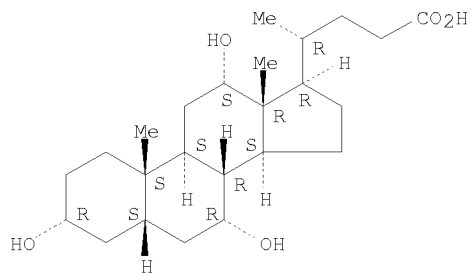
PAGE 3-B

CM 2

CRN 81-25-4

CMF C24 H40 O5

Absolute stereochemistry.



IT 288145-18-6P 288145-19-7P 288145-20-0P  
288145-21-1P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN

10576346

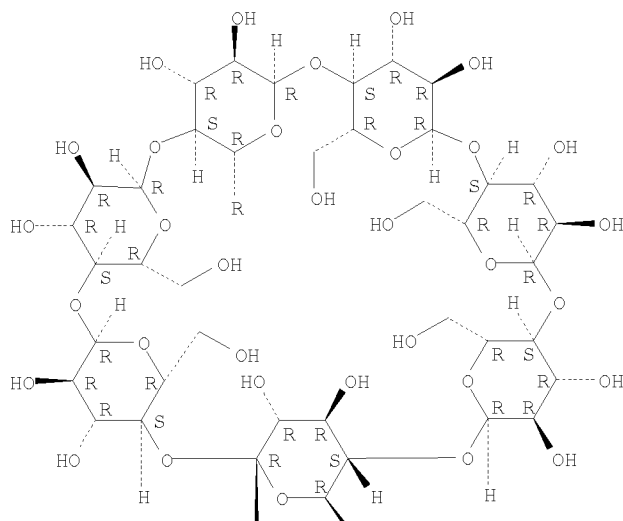
(Synthetic preparation); PREP (Preparation); PROC (Process)  
(preparation, conformation and mol.-recognition properties of  
 $\alpha$ -helical peptides containing  $\beta$ - cyclodextrin and  
dansyl units)

RN 288145-18-6 CAPLUS

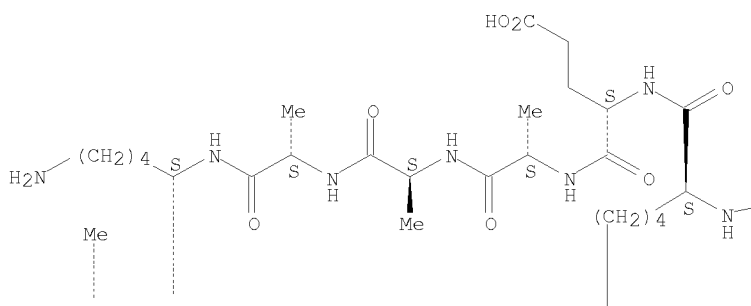
CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy-  
 $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -  
glutamyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-  
L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-  
(9CI) (CA INDEX NAME)

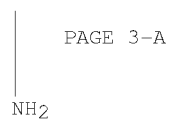
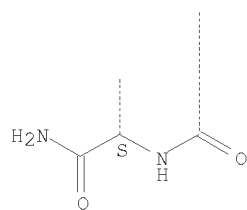
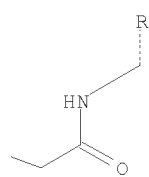
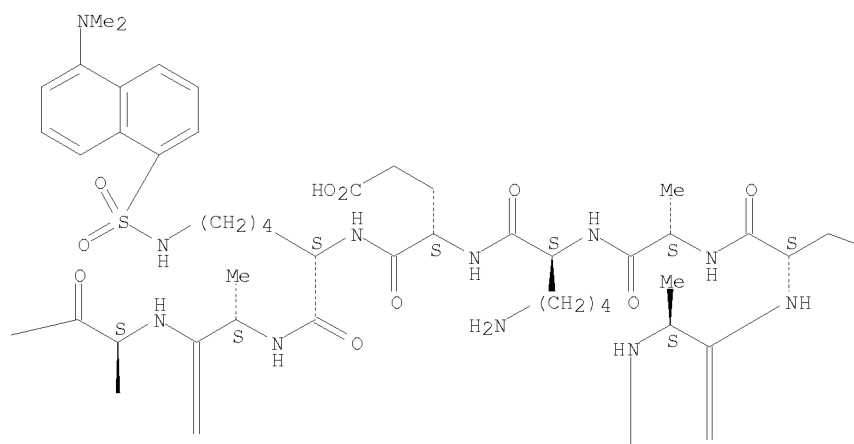
Absolute stereochemistry.

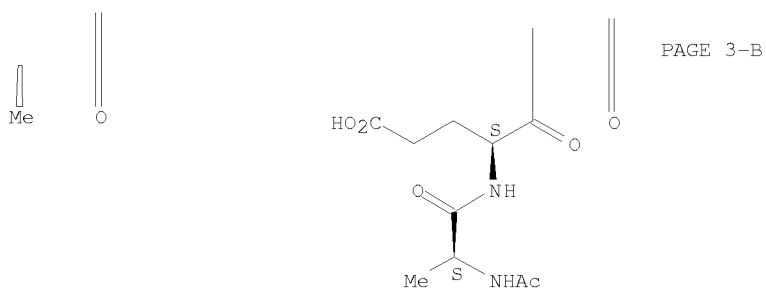
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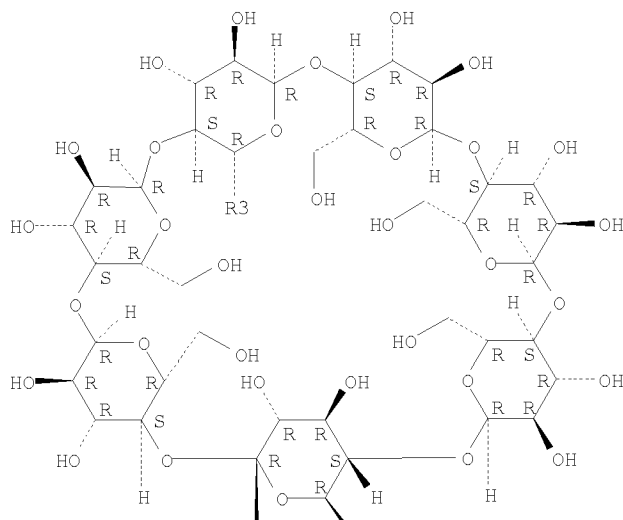




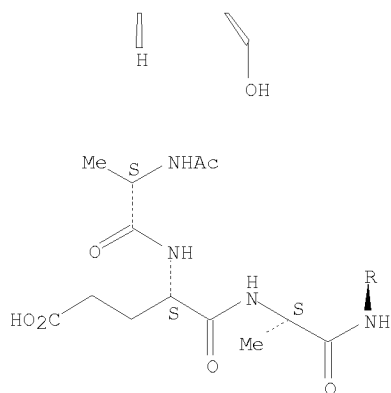
RN 288145-19-7 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

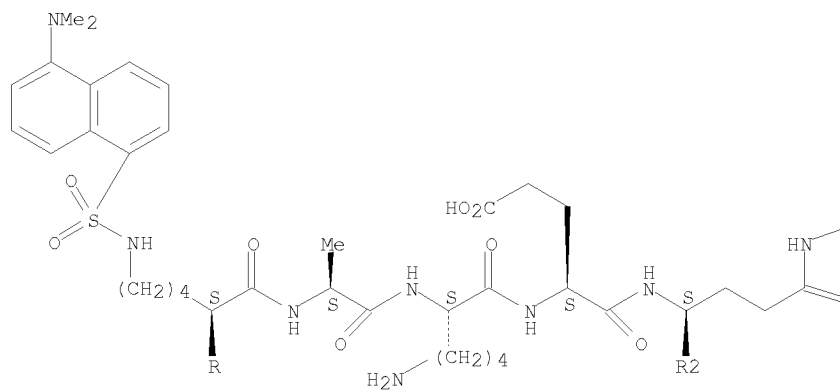
PAGE 1-A



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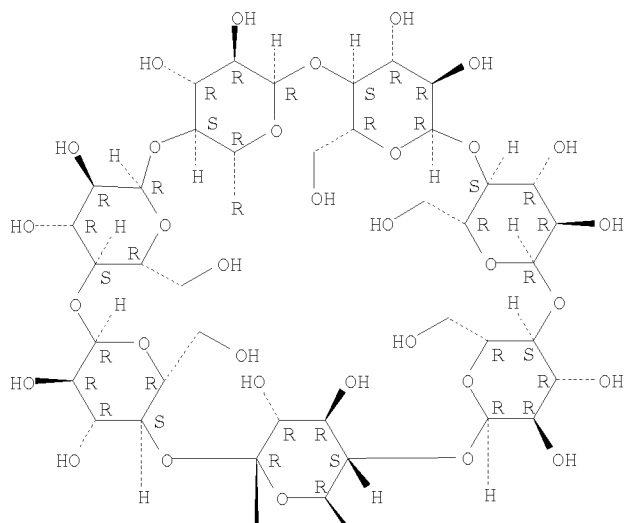
PAGE 3-A



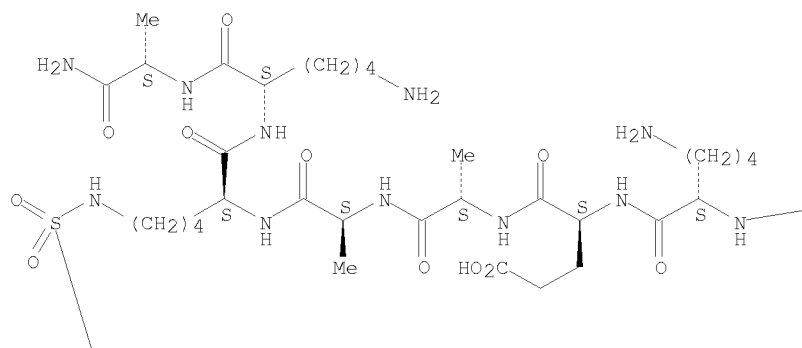
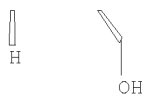


RN	288145-20-0	CAPLUS
CN	L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-lysyl-L- $\alpha$ -glutamyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N6-[5-(dimethylamino)-1-naphthalenyl]sulfonyl-L-lysyl-L-lysyl-(9CI)	
	(CA INDEX NAME)	

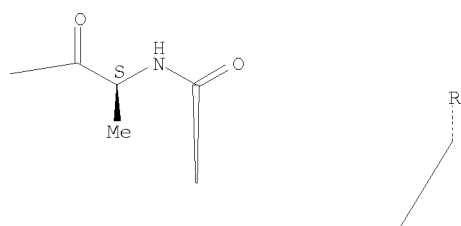
Absolute stereochemistry.



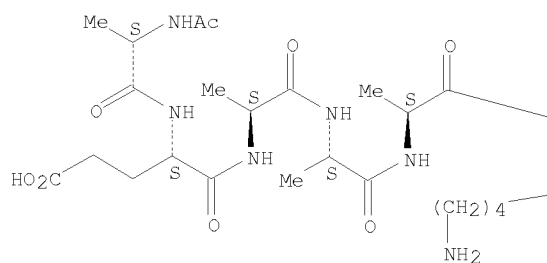
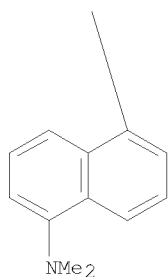
PAGE 2-A



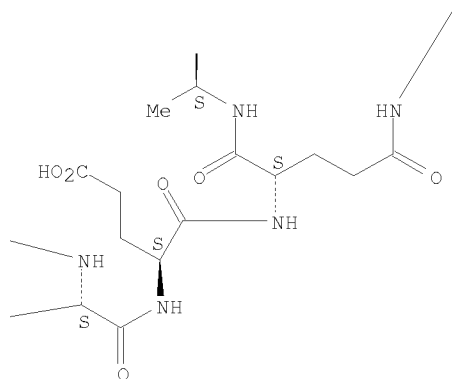
PAGE 2-B



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PAGE 3-B

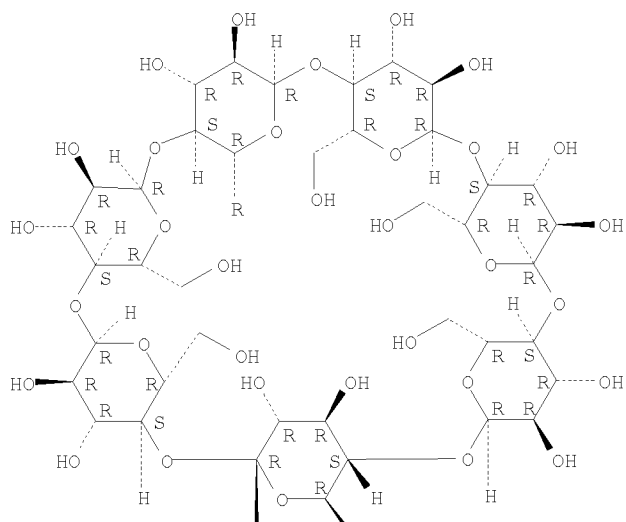


RN 288145-21-1 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-L-alanyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

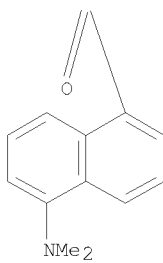
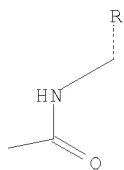
PAGE 1-A



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

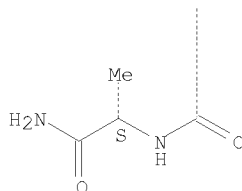
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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PAGE 3-B



REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:288756 CAPLUS

DOCUMENT NUMBER: 133:189728

TITLE: Targeting of proteinase inhibitors with  $\beta$ -cyclodextrin conjugates

AUTHOR(S): Schaschke, Norbert; Assfalg-Machleidt, Irmgard; Machleidt, Werner; Lassleben, Thomas; Sommerhoff, Christian P.; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut für Biochemie, Martinsried, 82152, Germany

SOURCE: Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 838-839. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Akademiai Kiado: Budapest, Hung. CODEN: 68WKAY

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The authors have taken a previously known potent cathepsin B inhibitor and conjugated it via a spacer to a functionalized  $\beta$ - cyclodextrin to target the potential drug to the appropriate place.

IT 277334-89-1 289490-23-9

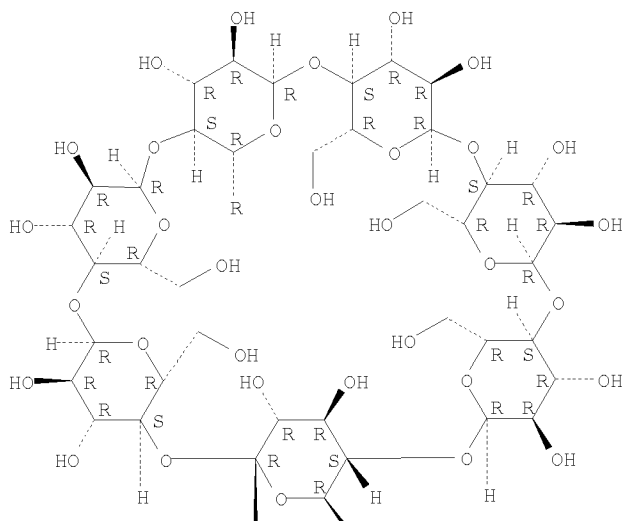
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (targeting of proteinase inhibitors with  $\beta$ - cyclodextrin conjugates)

RN 277334-89-1 CAPLUS

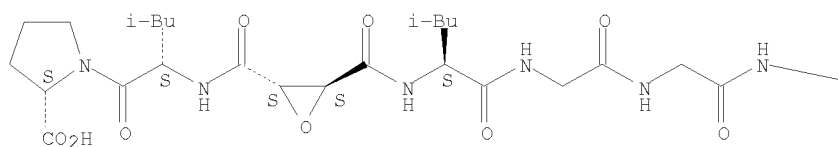
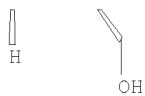
CN Glycinamide, N-[[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-6-oxohexyl]-, (1 $\rightarrow$ 1')-amide with L-leucyl-L-proline (9CI) (CA INDEX NAME)

Absolute stereochemistry.

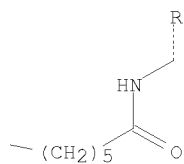
PAGE 1-A



PAGE 2-A



PAGE 2-B

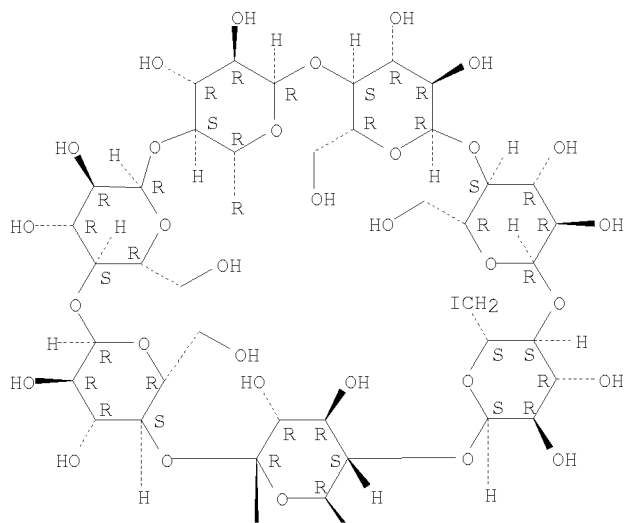


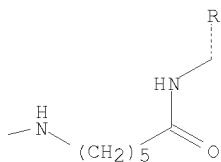
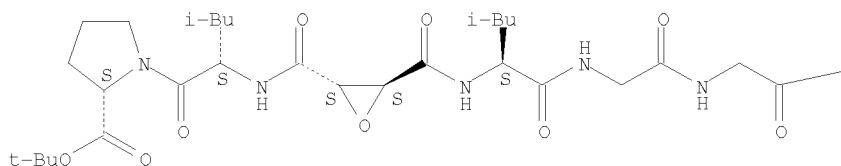
RN 289490-23-9 CAPLUS

CN Glycinamide, N-[[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-  
 [(6A,6D-dideoxy-6A-iodo-β-cyclodextrin-6D-yl)amino]-6-oxohexyl]-,  
 (1→1')-amide with L-leucyl-L-proline 1,1-dimethylethyl ester (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

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REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:269115 CAPLUS

DOCUMENT NUMBER: 133:101325

TITLE: Cyclodextrin-peptide hybrid as a hydrolytic catalyst having multiple functional groups

AUTHOR(S): Tsutsumi, Hiroshi; Hamasaki, Keita; Mihara, Hisakazu; Ueno, Akihiko

CORPORATE SOURCE: Department of Bioengineering, Faculty of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(8), 741-743

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A designed cyclodextrin-peptide hybrid, which has multiple functional groups on its  $\alpha$ -helix peptide backbone, has been synthesized as a catalyst for ester hydrolysis. Kinetic study revealed that the carboxylate group plays a key role in this system.

IT 283174-31-2 283174-32-3

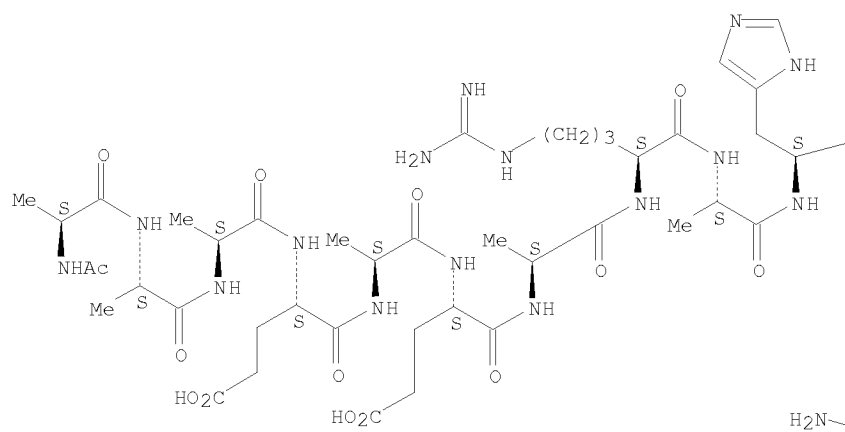
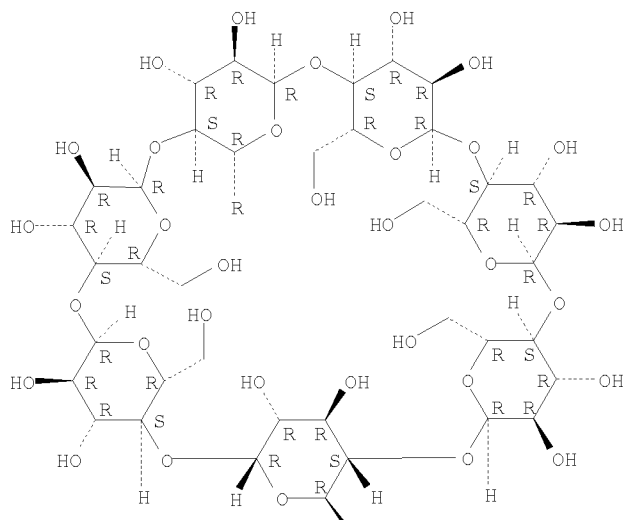
RL: BSU (Biological study, unclassified); CAT (Catalyst use); BIOL (Biological study); USES (Uses)

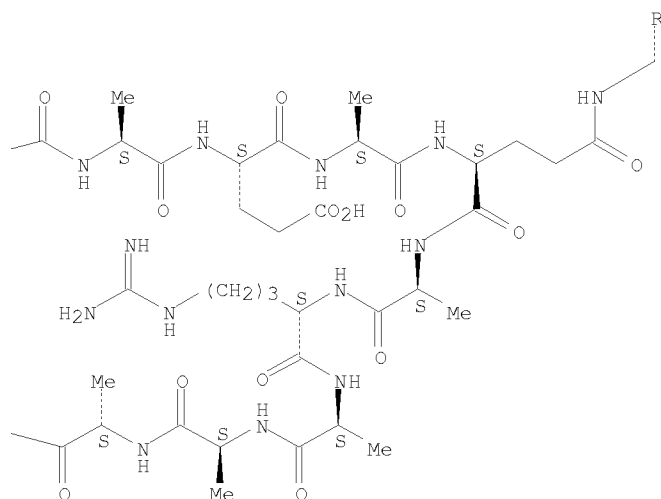
(cyclodextrin-peptide hybrid as a hydrolytic catalyst having multiple functional groups)

RN 283174-31-2 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

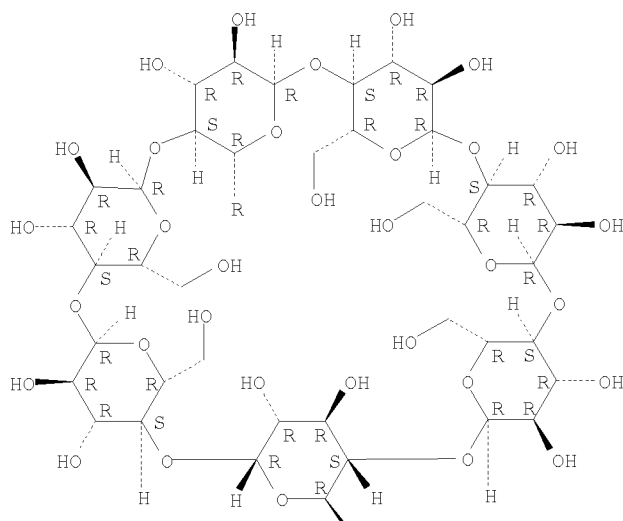




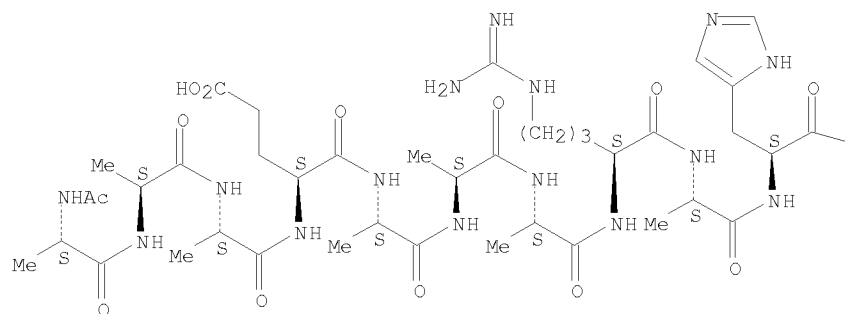
RN 283174-32-3 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-alanyl-L-arginyl-L-alanyl-L-histidyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-arginyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

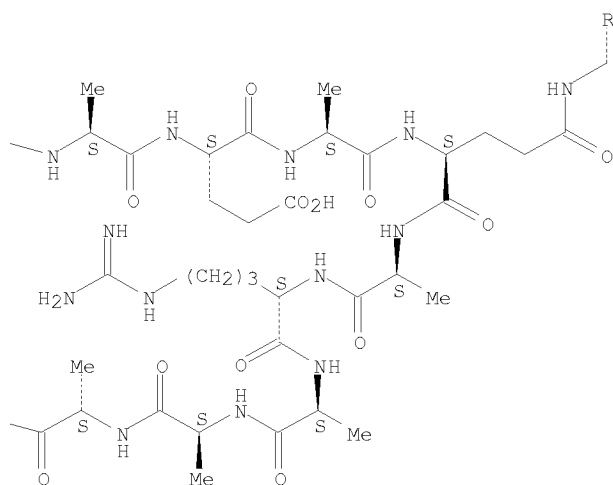
Absolute stereochemistry.



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H<sub>2</sub>N—

PAGE 3-B



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:235094 CAPLUS

DOCUMENT NUMBER: 133:59060

TITLE: **β- Cyclodextrin**/epoxysuccinyl peptide conjugates: a new drug targeting system for tumor cells

AUTHOR(S): Schaschke, Norbert; Assfalg-Machleidt, Irmgard; Machleidt, Werner; Lassleben, Thomas; Sommerhoff, Christian P.; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut für Biochemie, Martinsried, 82152, Germany

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(7), 677-680

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **β- Cyclodextrin** is known to form inclusion complexes with hydrophobic drugs. Several tumor cell lines are known to secrete and/or contain membrane-associated cathepsin B which is possibly involved in invasion and metastasis. Based on this information, our recently developed endo-epoxysuccinyl (Eps) peptide inhibitor

MeO-Gly-Gly-Leu-(2S,3S)-tEps-Leu-Pro-OH for cathepsin B was conjugated with  $\beta$ -**cyclodextrin** to obtain a site-directed drug carrier system. Furthermore, the conjugate was shown to form an inclusion complex with the cytotoxic drug methotrexate.

IT **277334-89-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

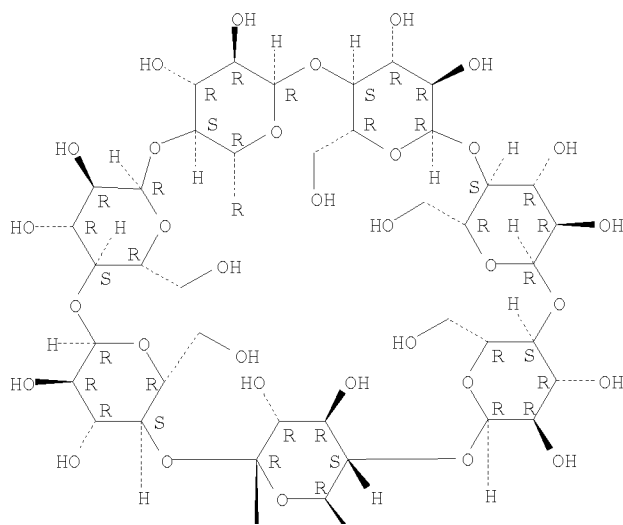
( $\beta$ -**cyclodextrin**/epoxysuccinyl peptide conjugates as drug targeting system for tumor cells)

RN 277334-89-1 CAPLUS

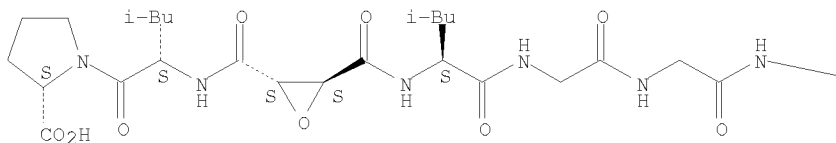
CN Glycinamide, N-[[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-6-oxohexyl]-, (1 $\rightarrow$ 1')-amide with L-leucyl-L-proline (9CI) (CA INDEX NAME)

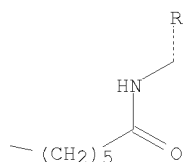
Absolute stereochemistry.

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IT **277334-90-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

( $\beta$ - **cyclodextrin**/epoxysuccinyl peptide conjugates as drug targeting system for tumor cells)

RN 277334-90-4 CAPLUS

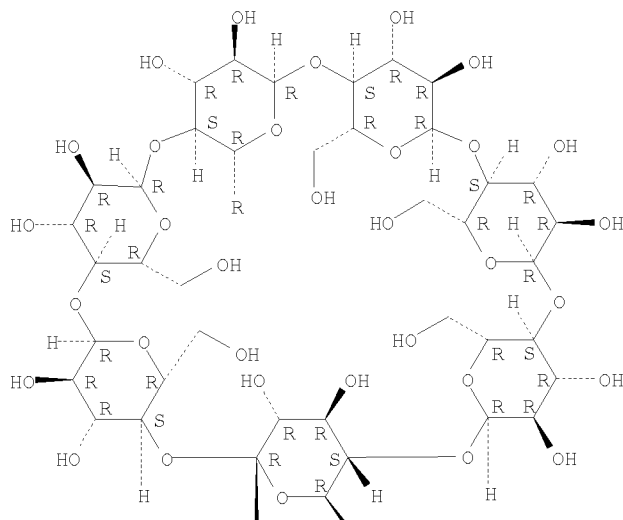
CN Glycinamide, N-[[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-6-oxohexyl]-, (1 $\rightarrow$ 1')-amide with L-leucyl-L-proline, compd. with N-[4-[[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L-glutamic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

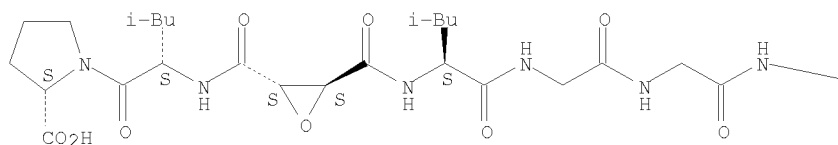
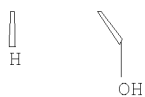
CRN 277334-89-1

CMF C73 H119 N7 O44

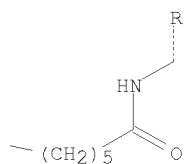
Absolute stereochemistry.



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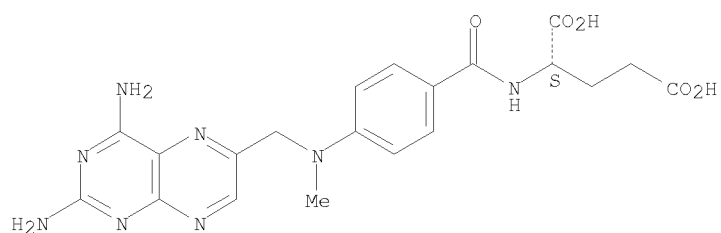


CM 2

CRN 59-05-2

CMF C20 H22 N8 O5

Absolute stereochemistry.

IT **277334-88-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

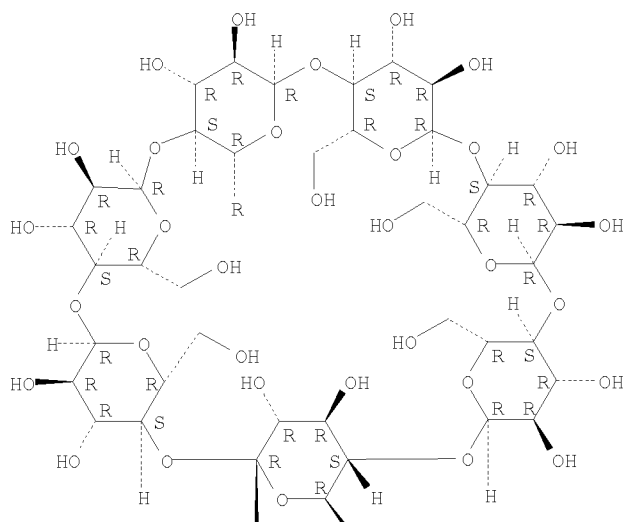
(β- **cyclodextrin**/epoxysuccinyl peptide conjugates as drug targeting system for tumor cells)

RN 277334-88-0 CAPLUS

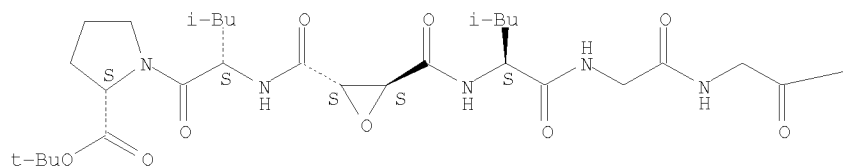
CN Glycinamide, N-[[[(2S,3S)-3-carboxyoxiranyl]carbonyl]-L-leucylglycyl-N-[6-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]-6-oxohexyl]-, (1→1')-amide with L-leucyl-L-proline 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

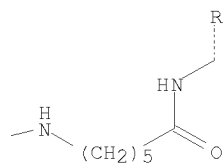
PAGE 1-A



PAGE 2-A



PAGE 2-B



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

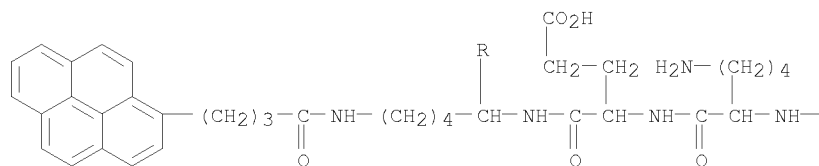
ACCESSION NUMBER: 2000:176768 CAPLUS

DOCUMENT NUMBER: 132:347898

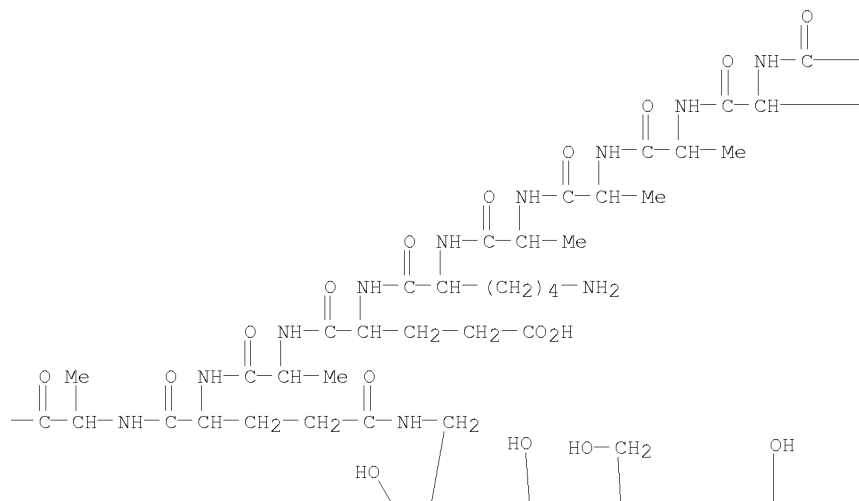
TITLE: Association and guest-induced dissociation of a novel  $\alpha$ -helix peptide bearing pyrene and  $\gamma$ -

AUTHOR(S): cyclodextrin in the side chains  
 Hossain, Mohammed Akhter; Hamasaki, Keita; Mihara,  
 Hisakazu; Ueno, Akihiko  
 CORPORATE SOURCE: Department of Bioengineering, Faculty of Bioscience  
 and Biotechnology, Tokyo Institute of Technology,  
 Yokohama, 226-8501, Japan  
 SOURCE: Chemistry Letters (2000), (3), 252-253  
 CODEN: CMLTAG; ISSN: 0366-7022  
 PUBLISHER: Chemical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A designed  $\alpha$ -helix peptide,  $\gamma$ -PR17, which bears  $\gamma$ -  
cyclodextrin ( $\gamma$ -CD) and pyrene units on an  
 Ac-AEAAAKEAEAKEKAAGA-NH<sub>2</sub> chain, exhibits both monomer and excimer  
 emissions, indicating that  $\gamma$ -PR17 forms an association dimer that could  
 be dissociated upon addition of hydoxycholic acid as a guest for  $\gamma$ -CD.  
 IT **270079-04-4P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation, mol. association, and dissociation of a cyclodextrin and  
 pyrene-containing peptide)  
 RN 270079-04-4 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L- $\alpha$ -glutamyl-L-alanyl-L-alanyl-L-  
 alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-alanyl-N-(6A-deoxy- $\gamma$ -  
 cyclodextrin-6A-yl)-L-glutamyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-N6-[1-  
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 INDEX NAME)

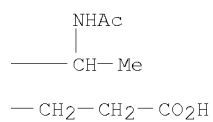
PAGE 1-A



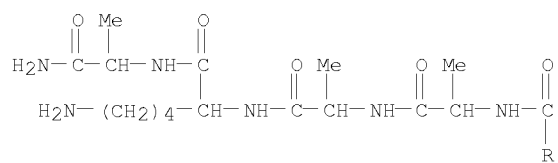
PAGE 1-B



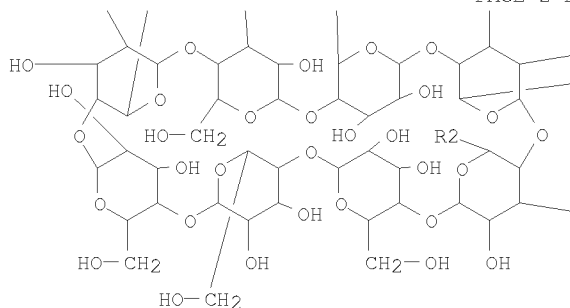
PAGE 1-C



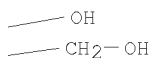
PAGE 2-A



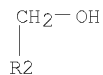
PAGE 2-B



PAGE 2-C



PAGE 3-A



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:56459 CAPLUS

DOCUMENT NUMBER: 132:237272

TITLE: Synthesis and enhanced chemiluminescence of new mono-cyclomaltooligosaccharide-bound 6-phenylimidazo[1,2-a]pyrazin-3(7H)-ones

AUTHOR(S): Teranishi, Katsunori; Tanabe, Saori; Komoda, Atsuko; Hisamatsu, Makoto; Yamada, Tetsuya

CORPORATE SOURCE: Faculty of Bioresources, Mie University, Mie, 514, Japan

SOURCE: Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 153-156. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L. Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 68NHAE

DOCUMENT TYPE: Conference

LANGUAGE: English

AB We report a first example of the synthesis of light-producing compds., in which MCLA, a chemiluminescent chromophore, is covalently bound to one cyclodextrin mol., and show that the chemiluminescence is effectively enhanced in an aqueous solvent.

IT 261736-14-5

RL: PRP (Properties)

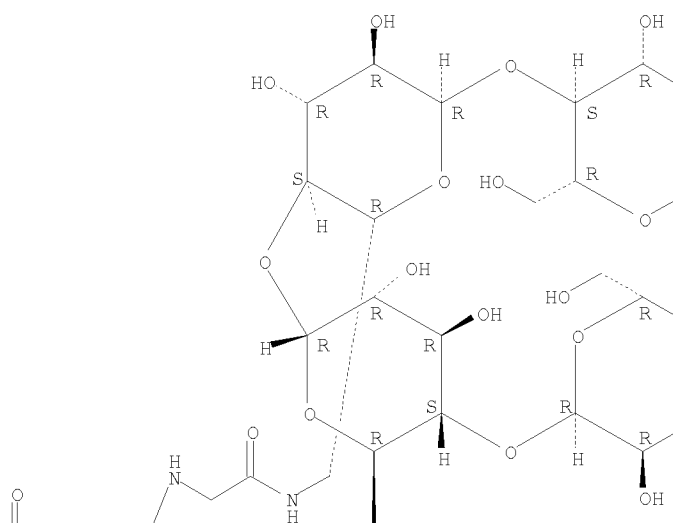
(synthesis and enhanced chemiluminescence of new monocyclomaltooligosaccharidebound phenylimidazopyrazinones)

RN 261736-14-5 CAPLUS

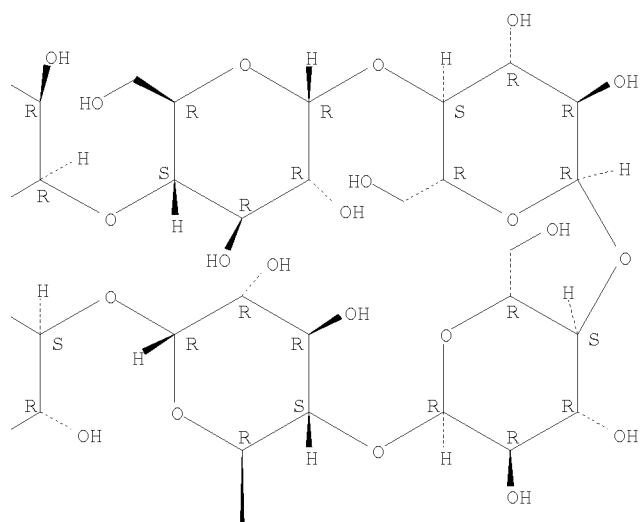
CN  $\gamma$ -Cyclodextrin, 6A-deoxy-6A-[[[N-[3-[3,7-dihydro-6-(4-methoxyphenyl)-3-oxoimidazo[1,2-a]pyrazin-2-yl]-1-oxopropyl]glycyl]glycyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

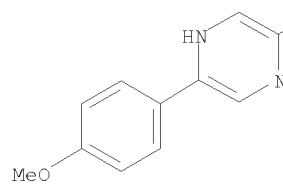
PAGE 1-B



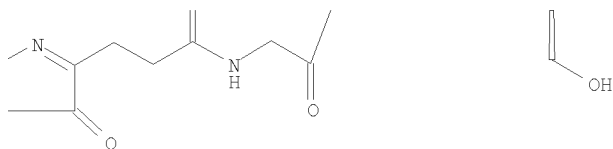
PAGE 1-C



PAGE 2-A



PAGE 2-B



PAGE 2-C



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:56440 CAPLUS

DOCUMENT NUMBER: 132:237293

TITLE: Thiourea-bridged  $\beta$ - cyclodextrin conjugates

AUTHOR(S): Mellet, C. Ortiz; Fernandez, J. M. Garcia; Benito, J. M.; Law, H.; Chmurski, K.; Defaye, J.

CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Quimica, Universidad de Sevilla, Seville, E-41071, Spain

SOURCE: Proceedings of the International Symposium on Cyclodextrins, 9th, Santiago de Comostela, Spain, May 31-June 3, 1998 (1999), Meeting Date 1998, 77-80. Editor(s): Labandeira, J. J. Torres; Vila-Jato, J. L. Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 68NHAЕ

DOCUMENT TYPE: Conference

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:237293

AB Saccharide as well as peptide antennae have been efficiently appended to the primary hydroxyl rim of the  $\beta$ -CD core through thiourea tethers. The synthetic strategy involves the coupling reaction of glycosyl or peptide isothiocyanates with amine functionalized  $\beta$ -CDs and has been applied to the preparation of mono- as well as heptavalent derivs. The new conjugates exhibited a dramatic increase in water solubility as compared to  $\beta$ -CD itself while retaining the inclusion properties towards the anticancer drug taxotere.

IT 261714-40-3P 261714-41-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

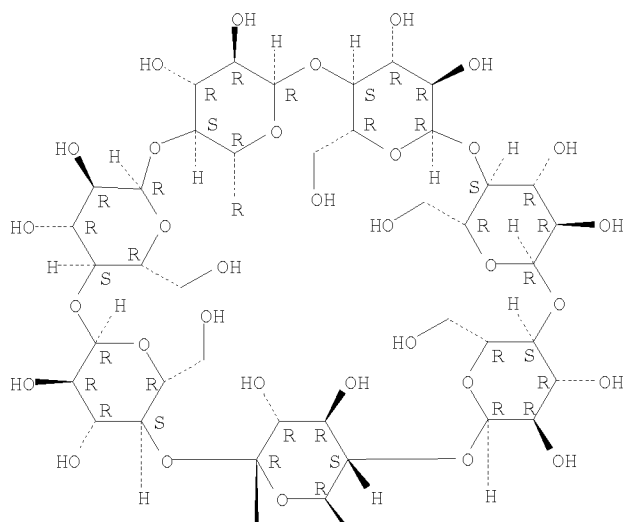
(thiourea-bridged  $\beta$ - cyclodextrin conjugates with peptides and inclusion complexes with taxotere)

RN 261714-40-3 CAPLUS

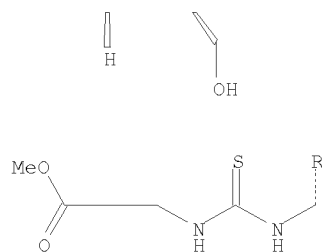
CN Glycine, N-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]thioxomethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



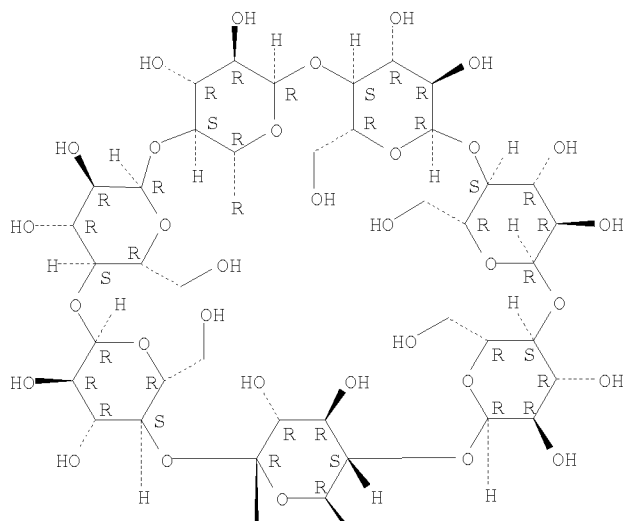
PAGE 2-A

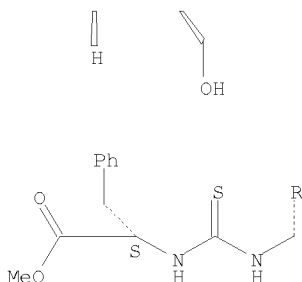


RN 261714-41-4 CAPLUS  
 CN L-Phenylalanine, N-[[6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]thioxomethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:396543 CAPLUS

DOCUMENT NUMBER: 131:214547

TITLE: Cyclodextrin as carrier of bioactive peptides

AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Fourmy, Daniel; Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried, 82152, Germany

SOURCE: Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 315-316.

Editor(s): Tam, James P.; Kaumaya, Pravin T. P.

Kluwer: Dordrecht, Neth.

CODEN: 67UCAR

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report. Tetra- and heptagastrin peptide/ $\beta$ -cyclodextrin conjugates were prepared and their binding affinities to the CCK- $\beta$ /gastrin receptor were determined

IT 211360-86-0P 211360-87-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

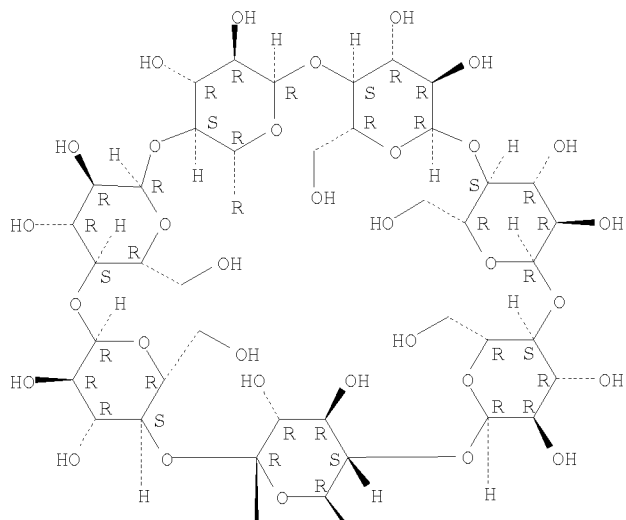
(preparation and cyclodextrin-supported bioactive peptides)

RN 211360-86-0 CAPLUS

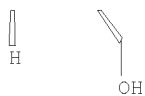
CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

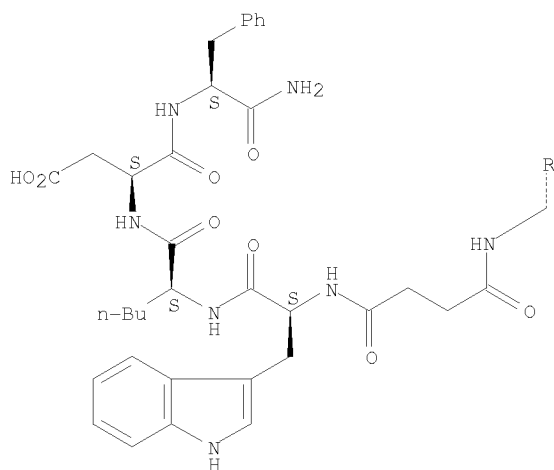
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PAGE 3-A

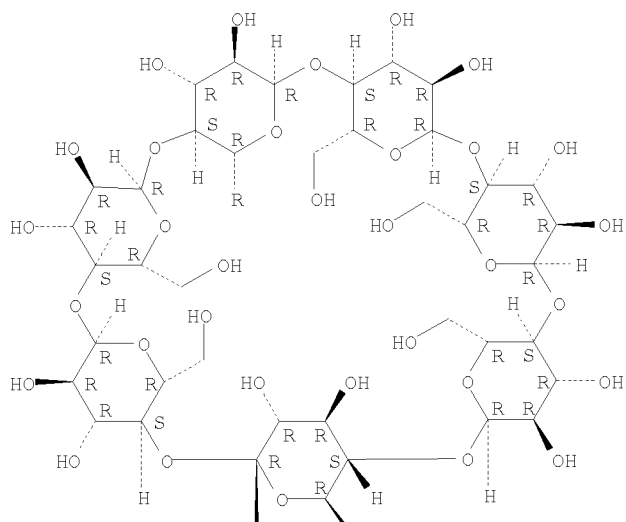


RN 211360-87-1 CAPLUS

CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl) amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylglycyl-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

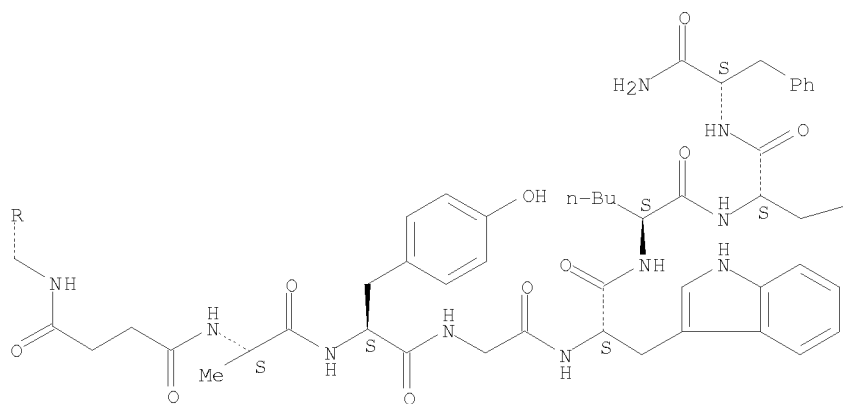
PAGE 1-A



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PAGE 3-B



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 54 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:431175 CAPLUS

DOCUMENT NUMBER: 129:180027

ORIGINAL REFERENCE NO.: 129:36481a,36484a

TITLE: Cyclodextrin as Carrier of Peptide Hormones.  
Conformational and Biological Properties of  $\beta$ -  
Cyclodextrin/Gastrin Constructs

AUTHOR(S): Schaschke, Norbert; Fiori, Stella; Weyher, Elisabeth;  
Escrieut, Chantal; Fourmy, Daniel; Mueller, Gerhard;  
Moroder, Luis

CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, Martinsried,  
82152, Germany

SOURCE: Journal of the American Chemical Society (1998),  
120(28), 7030-7038  
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The C-terminal tetrapeptide amide of gastrin, the shortest sequence of this gastrointestinal hormone capable of exhibiting all the biol. properties even though at reduced potency, and the related heptapeptide amide were covalently linked to mono-(6-succinylamino-6-deoxy)- $\beta$ -cyclodextrin to analyze the effect of the bulky cyclic carbohydrate moiety on recognition of the peptides by the G-protein-coupled CCK-B/gastrin receptor and on their signal transduction potencies. With the four-carbon succinyl spacer and particularly with the addnl. tripeptide spacer in the heptapeptide/ $\beta$ -cyclodextrin conjugate, full recognition by the receptor was obtained with binding affinities identical to those of the unconjugated tetrapeptide and with a potency comparable to that of full agonists. Docking of this conjugate onto a structure of the human CCK-B receptor derived by homol. modeling indicates sufficient free space of the peptide moiety for intermol. interaction at the putative gastrin binding site, whereby addnl. interactions of the cyclodextrin with the receptor surface apparently suffice for stabilizing the complex and thus for triggering the full hormonal message. The host/guest complexation of the peptide moiety by the  $\beta$ -cyclodextrin which seems to occur at least in the case of the tetrapeptide conjugate does not suffice in its strength for competing with the receptor recognition. However, multiple presentation of the tetragastrin by its covalent linkage to the heptakis-(6-succinylamino-6-deoxy)- $\beta$ -cyclodextrin leads to peptide/peptide and/or peptide/cyclodextrin collapses with strong interferences in the receptor recognition process. Retention of full agonism by suitably designed monoconjugates of bioactive peptides with cyclodextrins suggests a highly promising approach for targeting host/guest complexed or covalently bound cytotoxic drugs to specific tumor cells for receptor-mediated internalization.

IT 211360-86-0P 211360-87-1P

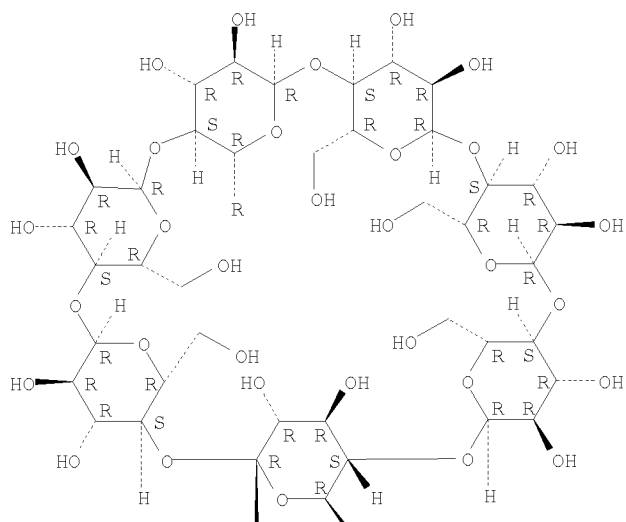
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(conformational and biol. properties of  $\beta$ -cyclodextrin  
/gastrin constructs)

RN 211360-86-0 CAPLUS

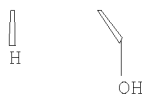
CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

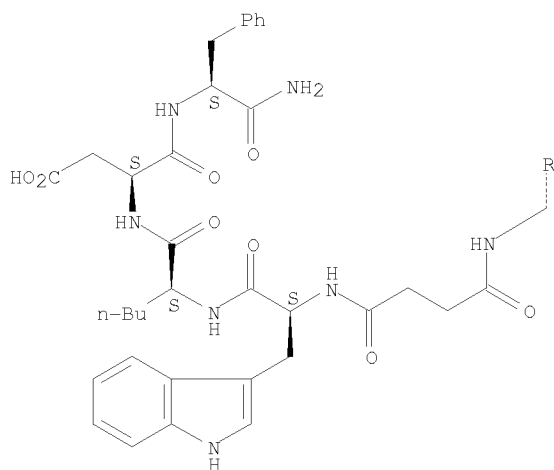
PAGE 1-A



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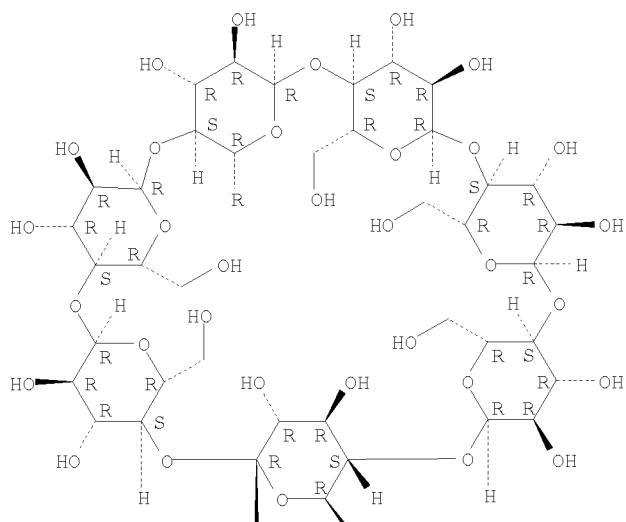


RN 211360-87-1 CAPLUS

CN L-Phenylalaninamide, N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-alanyl-L-tyrosylglycyl-L-tryptophyl-L-norleucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

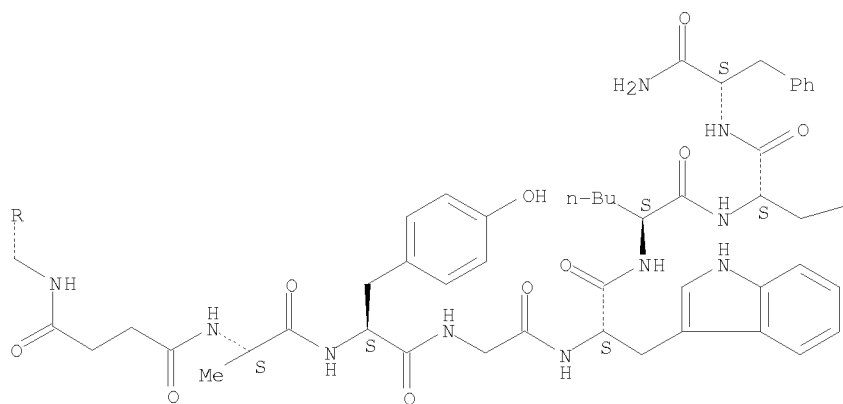
PAGE 1-A



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REFERENCE COUNT:

63

THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:282001 CAPLUS

DOCUMENT NUMBER: 129:28133

ORIGINAL REFERENCE NO.: 129:6007a

TITLE: Synthesis and intramolecular inclusion studies of tryptophan-modified- $\beta$ - **cyclodextrins**

AUTHOR(S): Donze, Cecile; Rizzarelli, Enrico; Vecchio, Graziella

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, 95125, Italy

SOURCE: Journal of Inclusion Phenomena and Molecular Recognition in Chemistry (1998), 31(1), 27-41  
CODEN: JIMCEN; ISSN: 0923-0750

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB  $\beta$ - **Cyclodextrins** functionalized by D or L-tryptophan were synthesized. NMR, CD and fluorescence investigations were carried out showing the clear intramol. inclusion of the tryptophan in the **cyclodextrin** cavity. The derivs. act as a fluorescent sensor which is useful for detecting organic species in solution Furthermore, derivs. L and D show different sensitivity with regard to their interaction with a guest. The difference might be due to the disposition of the indole with respect to the cavity of the **cyclodextrin**, induced by the chirality of the tryptophan.

IT **208038-18-0P 208038-19-1P 208038-20-4P 208038-21-5P**

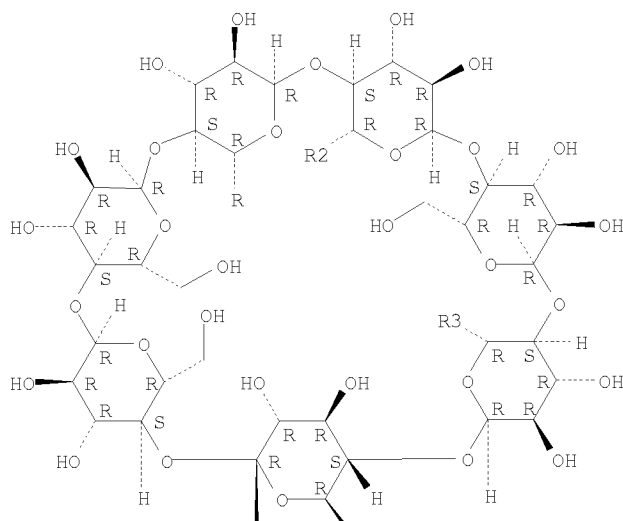
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(synthesis and intramol. inclusion studies of tryptophanmodifiedbcyclodextrins)

RN 208038-18-0 CAPLUS

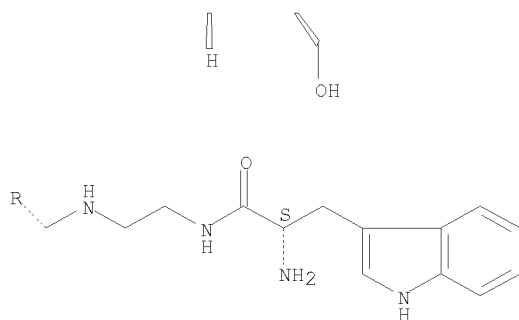
CN  $\beta$ -Cyclodextrin, 6A-[[2-[[[(2S)-2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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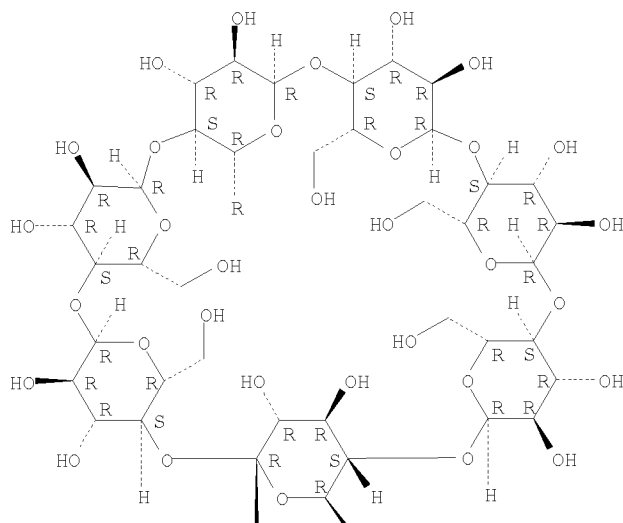


RN 208038-19-1 CAPLUS

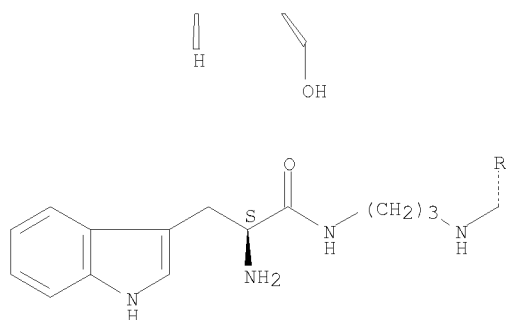
CN  $\beta$ -Cyclodextrin, 6A-[[3-[[[(2S)-2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]propyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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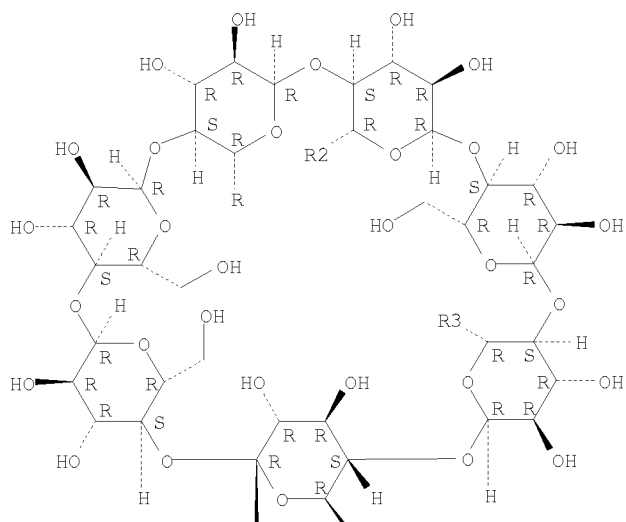


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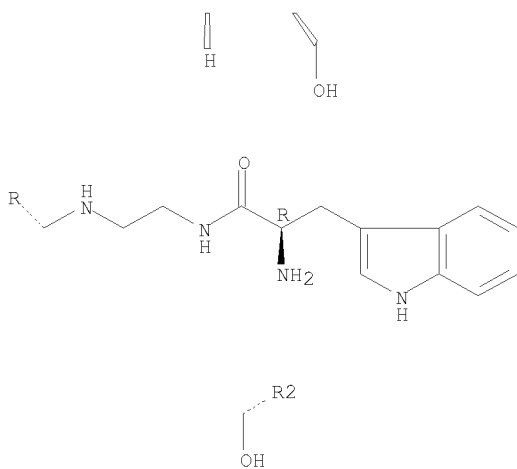
CN  $\beta$ -Cyclodextrin, 6A-[[2-[[[(2R)-2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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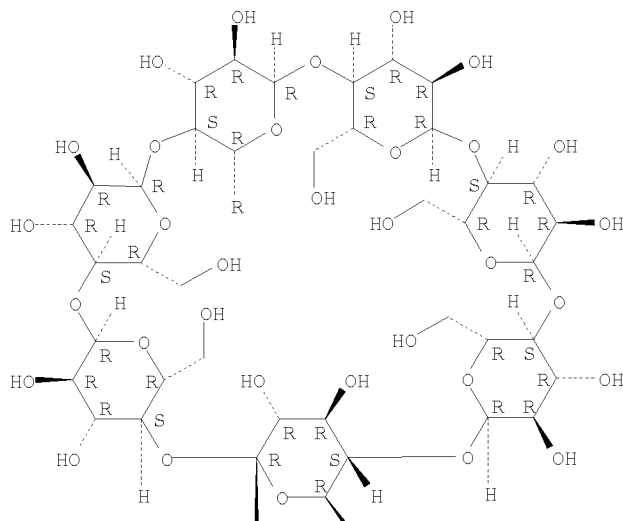


RN 208038-21-5 CAPLUS

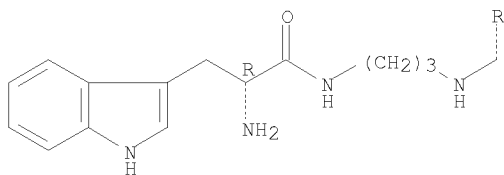
CN  $\beta$ -Cyclodextrin, 6A-[[3-[[[(2R)-2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]propyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT **208038-22-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

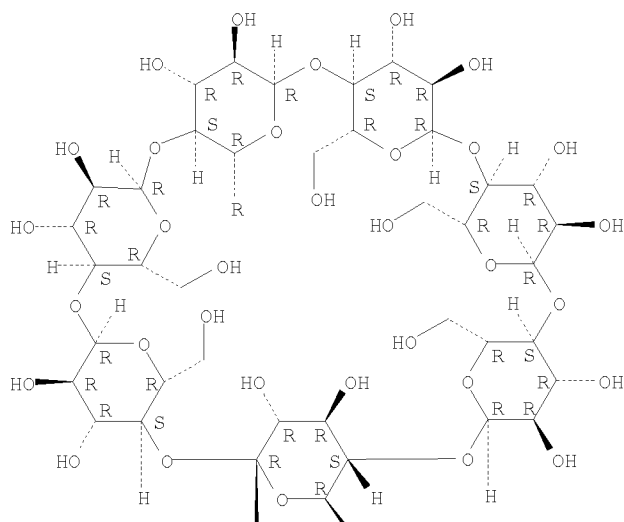
(synthesis and intramol. inclusion studies of tryptophanmodifiedcyclodextrins)

RN 208038-22-6 CAPLUS

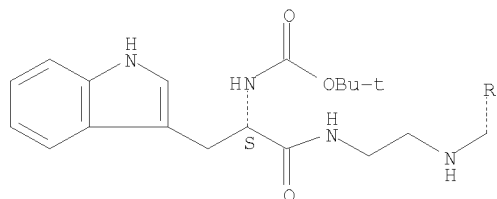
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[2-[[[(2S)-2-[[[(1,1-dimethylethoxy)carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:491249 CAPLUS

DOCUMENT NUMBER: 125:215415

ORIGINAL REFERENCE NO.: 125:40139a

TITLE: **Cyclodextrins** as templates for the presentation of protease inhibitors

AUTHOR(S): Schaschke, N.; Musiol, H.-J.; Assfalg-Machleidt, I.; Machleidt, W.; Rudolph-Boehner, S.; Moroder, L.

CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, AG Bioorganische Chemie, Am Klopferspitz 18A, Martinsried, 82152, Germany

SOURCE: FEBS Letters (1996), 391(3), 297-301

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:215415

AB Mono(6-succinylamido-6-deoxy)- $\beta$ - **cyclodextrin** was synthesized by classical carbohydrate chemical and used as a template mono-functionalized with the linear, fully flexible 4C-spacer carboxylate for covalent linkage of the calpain inhibitor leucyl-leucyl-norleucinal. Spectroscopic analyses of the conjugate do not support a self-inclusion of part of the hydrophobic peptide tail, but confirm its intra-or intermol. interaction with the template moiety that leads to full water solubility The

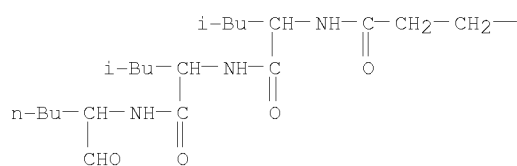
181487-21-8P

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(preparation of cyclodextrin conjugates for presentation of
protease inhibitors)
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RN 181487-21-8 CAPLUS

CN L-Norleucine, N-[N-[N-[4-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]-1,4-dioxobutyl]-L-leucyl]-L-leucyl]- (9CI) (CA INDEX NAME)

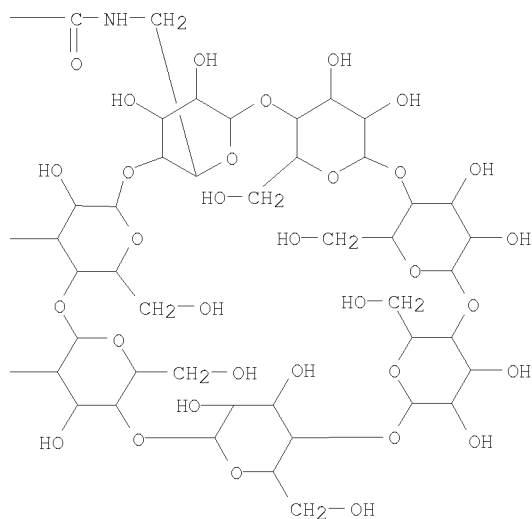
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HO—

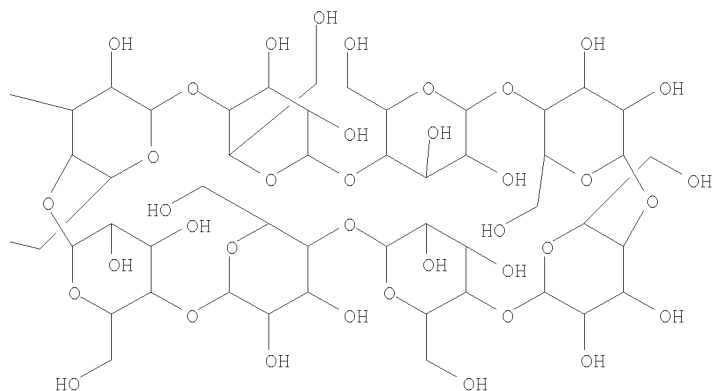
HO—

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CN  $\gamma$ -Cyclodextrin, 6A-deoxy-6A-[[2-[[2-[[[2-(9H-fluoren-9-ylmethoxy)carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-, (S)- (9CI) (CA INDEX NAME)

O=C(NC(=O)NCCN)CNC(=O)OC1c2ccccc2-c3ccccc13



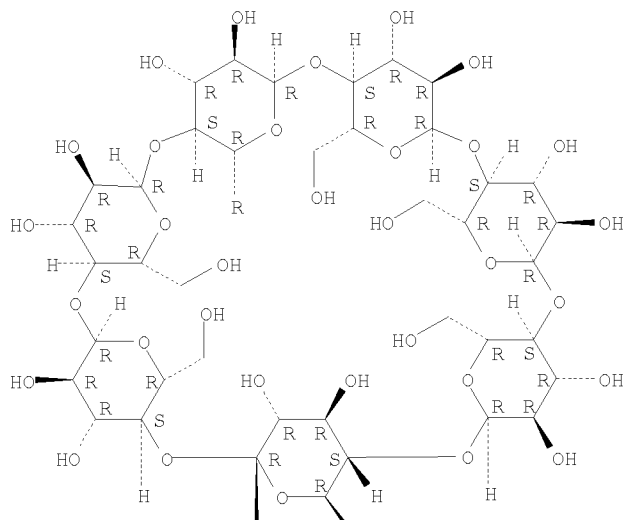
IT 169624-51-5P 169624-52-6P 169624-53-7P  
169624-54-8P 169624-57-1P 169624-62-8P  
169624-63-9P 169624-64-0P 169624-65-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and intramol. inclusion complexation in peptido-  
**cyclodextrins** as evidenced by NMR)

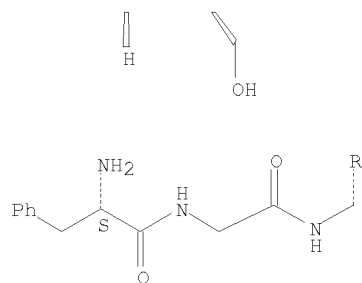
RN 169624-51-5 CAPLUS

CN Glycinamide, L-phenylalanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



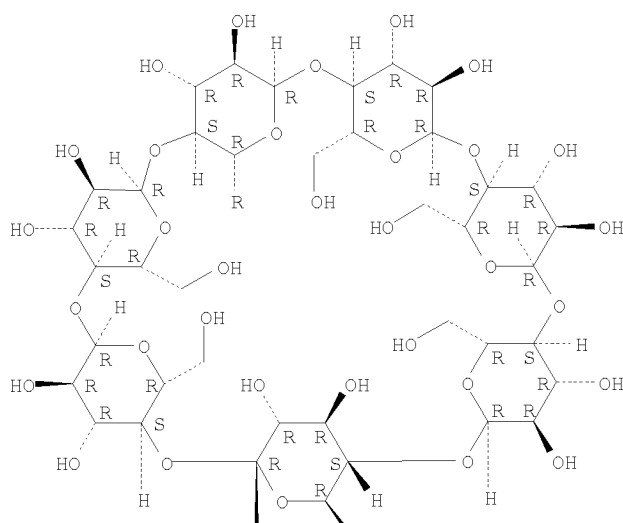
PAGE 2-A



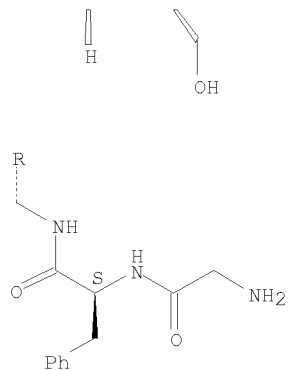
RN 169624-52-6 CAPLUS  
 CN L-Phenylalaninamide, glycyL-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



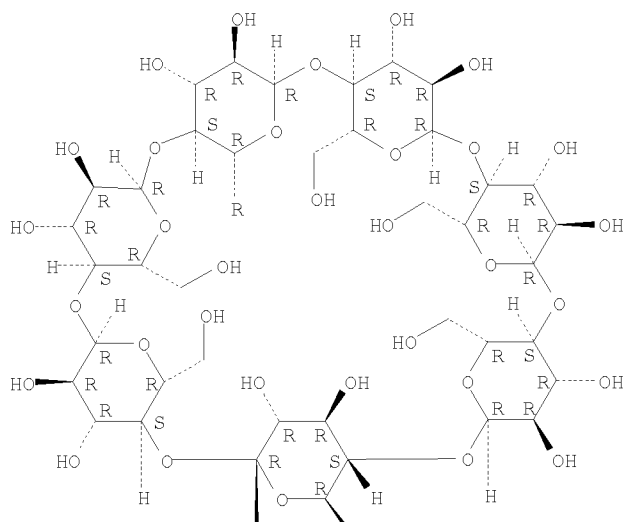
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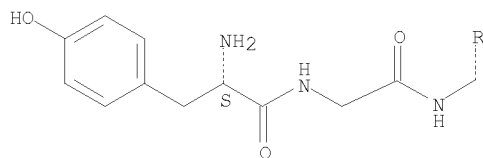
RN 169624-53-7 CAPLUS  
 CN Glycinamide, L-tyrosyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

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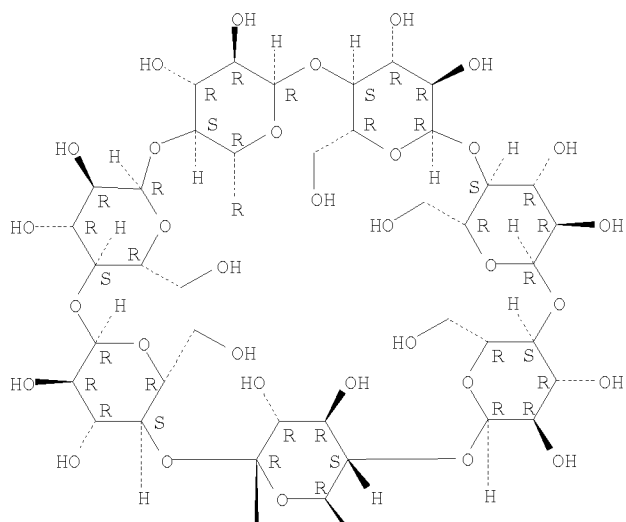


RN 169624-54-8 CAPLUS

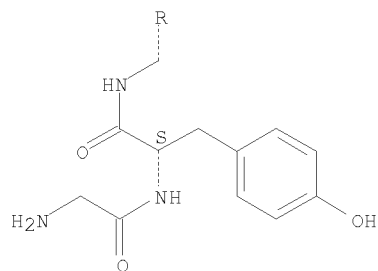
CN L-Tyrosinamide, glycyL-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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RN 169624-57-1 CAPLUS

CN  $\gamma$ -Cyclodextrin, 6A-[[2-[[2-amino-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethyl]amino]-6A-deoxy-, (S)- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

PAGE 2-A

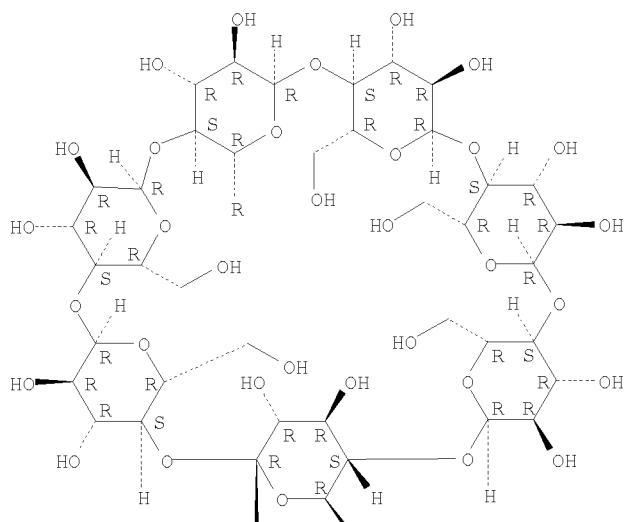


RN 169624-62-8 CAPLUS

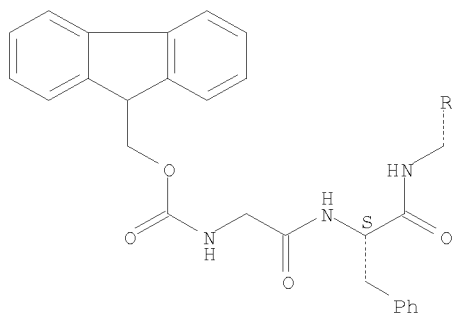
CN L-Phenylalaninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

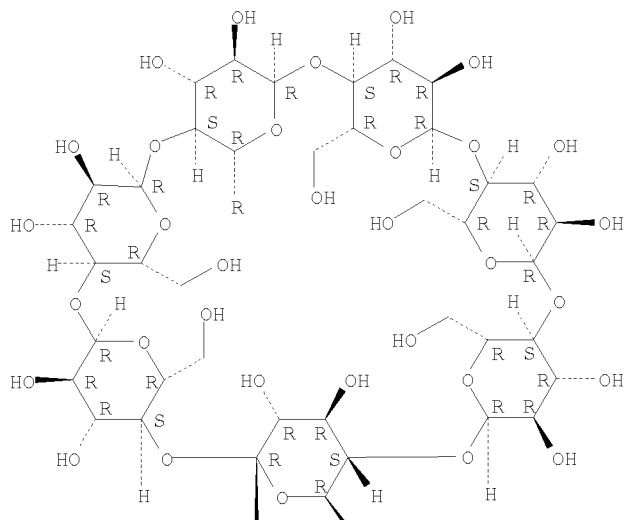


RN 169624-63-9 CAPLUS

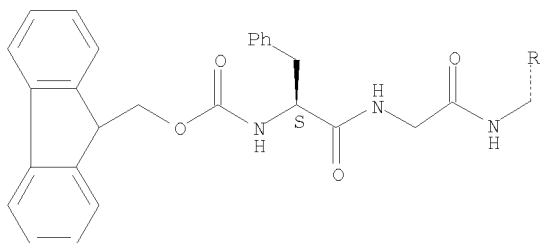
CN Glycinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-phenylalanyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

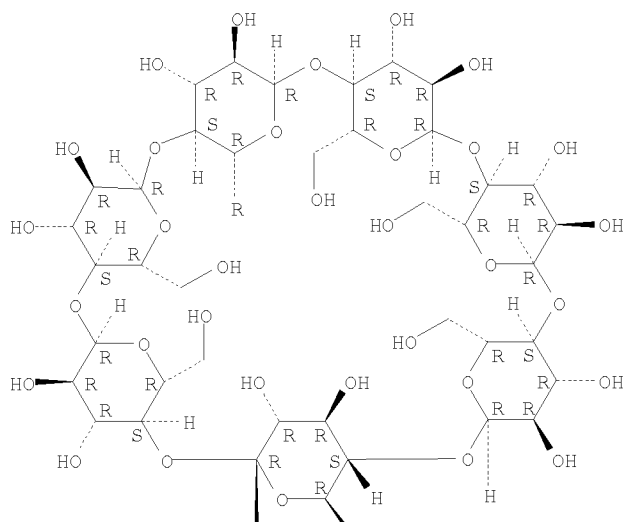


RN 169624-64-0 CAPLUS

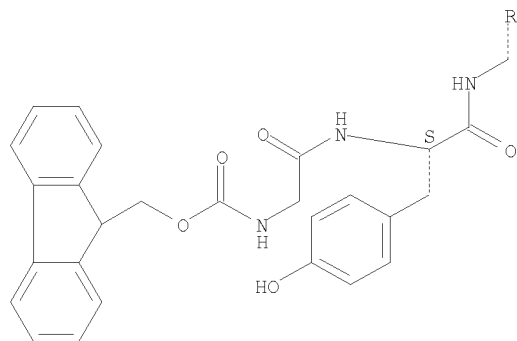
CN L-Tyrosinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



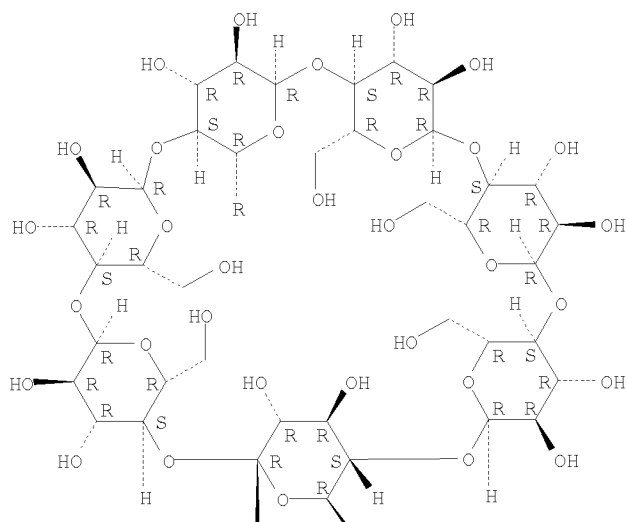
PAGE 2-A



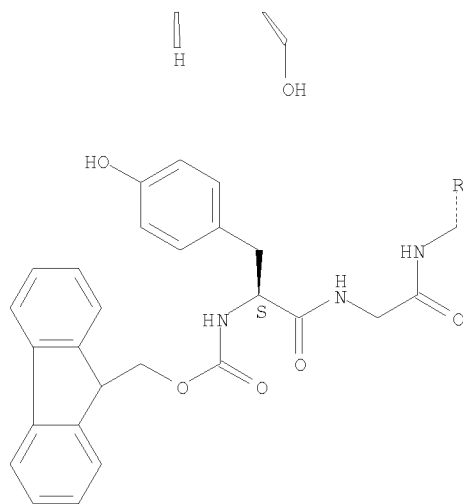
RN 169624-65-1 CAPLUS  
 CN Glycinamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-tyrosyl-N-(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



L8 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:352411 CAPLUS

DOCUMENT NUMBER: 122:265853

ORIGINAL REFERENCE NO.: 122:48553a

TITLE: Synthesis and characterization of  
cyclomaltoheptaose-based metal chelants as probes for  
intestinal permeability

AUTHOR(S): Capretta, Alfredo; Maharajh, Rabindranath B.; Bell,  
Russell A.

CORPORATE SOURCE: Department of Chemistry, McMaster University,  
Hamilton, ON, L8S 4M1, Can.

SOURCE: Carbohydrate Research (1995), 267(1), 49-63  
CODEN: CRBRAT; ISSN: 0008-6215

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The syntheses of two cyclomaltoheptaose-based metal chelants,  
cyclomaltoheptaose-ethylenediaminetetraacetate (CD-EDTA) and  
cyclomaltoheptaose-diamide-disulfur (CD-DADS), are described. The chelant

moieties are attached to the 6-position of a single pyranose in the cyclomaltoheptaose via a short diamine spacer chain. Characterization of these novel chelants has been achieved using NMR and MS techniques. The peculiar fluxional properties of the CD-EDTA mols. is also discussed.

IT 162332-01-6P 162428-27-5P 162438-66-6P  
162438-67-7P

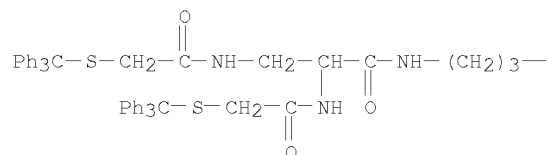
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and characterization of cyclomaltoheptaosebased metal chelants as probes for intestinal permeability)

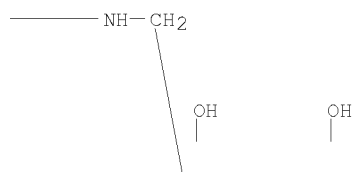
RN 162332-01-6 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[3-[[1-oxo-2,3-bis[[[(triphenylmethyl)thio]acetyl]amino]propyl]amino]propyl]amino]- (9CI)  
 (CA INDEX NAME)

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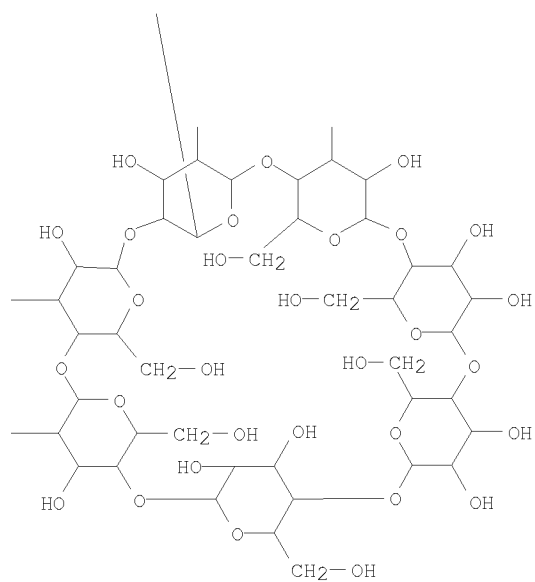
PAGE 1-B



PAGE 2-A

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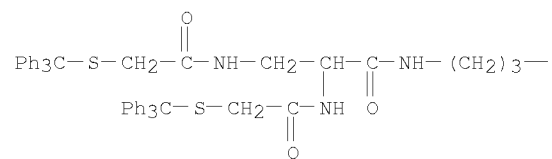
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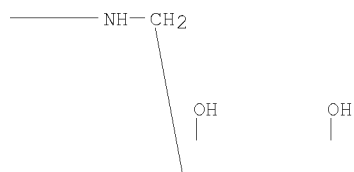
PAGE 2-B

RN 162428-27-5 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[3-[[1-oxo-2,3-bis[[[(triphenylmethyl)thio]acetyl]amino]propyl]amino]propyl]amino]-, (S)-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

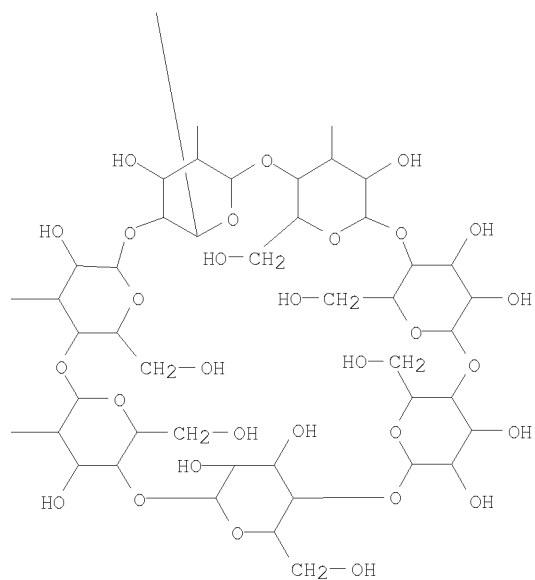


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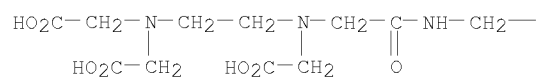
PAGE 2-B



RN 162438-66-6 CAPLUS

CN Glycine, N-[2-[bis(carboxymethyl)amino]ethyl]-N-[2-[2-[(6A-deoxy- $\beta$ -cyclodextrin-6A-yl)amino]ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

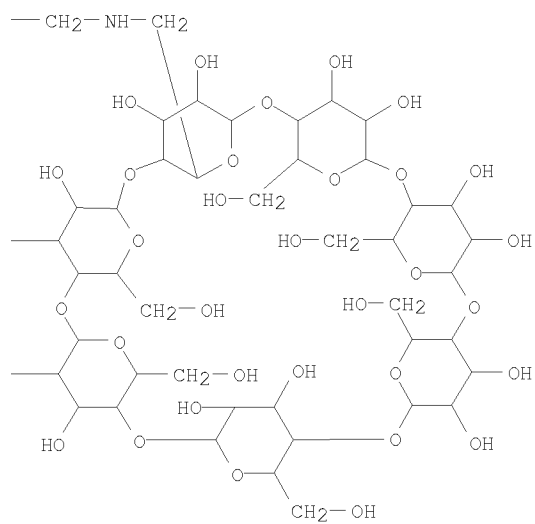
PAGE 1-A



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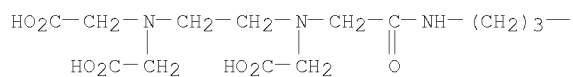
PAGE 1-B



RN 162438-67-7 CAPLUS

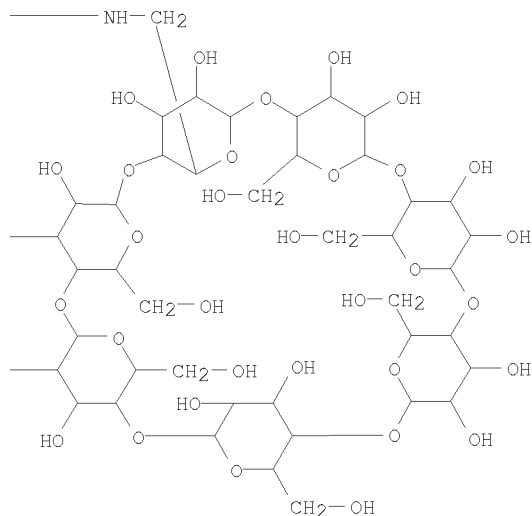
CN Glycine, N-[2-[bis(carboxymethyl)amino]ethyl]-N-[2-[[3-[(6A-deoxy-β-cyclodextrin-6A-yl)amino]propyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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L8 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:442855 CAPLUS

DOCUMENT NUMBER: 121:42855

ORIGINAL REFERENCE NO.: 121:7705a,7708a

TITLE: Lanthanide-**Cyclodextrin** Complexes as Probes  
for Elucidating Optical Purity by NMR Spectroscopy

AUTHOR(S): Wenzel, Thomas J.; Bogyo, Matthew S.; Lebeau, Estelle  
L.

CORPORATE SOURCE: Department of Chemistry, Bates College, Lewiston, ME,  
04240, USA

SOURCE: Journal of the American Chemical Society (1994),  
116(11), 4858-65

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A multidentate ligand was bonded to **cyclodextrins** by the reaction of diethylenetriaminepentaacetic dianhydride with 6-mono- and 2-mono(ethylenediamine) derivs. of **cyclodextrin**. Adding Dy(III) to the **cyclodextrin** derivs. enhanced the enantiomeric resolution in the NMR spectra of carbinoxamine maleate, doxylamine succinate, pheniramine maleate, propranolol-HCl, and tryptophan. The enhancement was more pronounced with the secondary derivative. The Dy(III)-induced shifts were used to elucidate the geometry of **cyclodextrin**-substrate inclusion complexes. Lanthanide-induced shifts are reported for complexes of aspartame, tryptophan, propranolol, and 1-anilino-8-naphthalenesulfonate with **cyclodextrins**, and the relative magnitudes of the shifts agree with previously reported structures of the complexes.

IT **155635-13-5P**

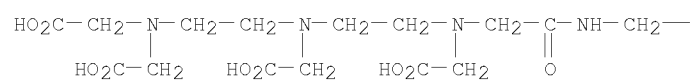
RL: PREP (Preparation)

(preparation and conversion to triammonium salt)

RN 155635-13-5 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-[[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-tetraazatridec-1-yl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

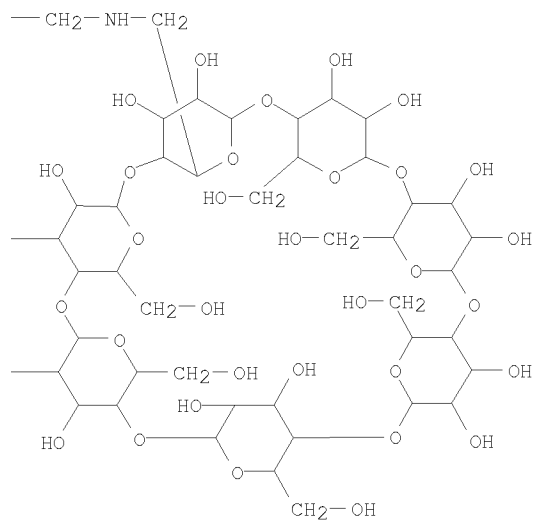
PAGE 1-A



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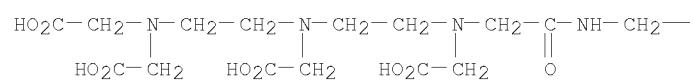
PAGE 1-B

IT **155635-14-6P 155635-15-7P**RL: PREP (Preparation)  
(preparation of)

RN 155635-14-6 CAPLUS

CN  **$\beta$ -Cyclodextrin, 6A-[[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-tetraazatridec-1-yl]amino]-6A-deoxy-, triammonium salt (9CI) (CA INDEX NAME)**

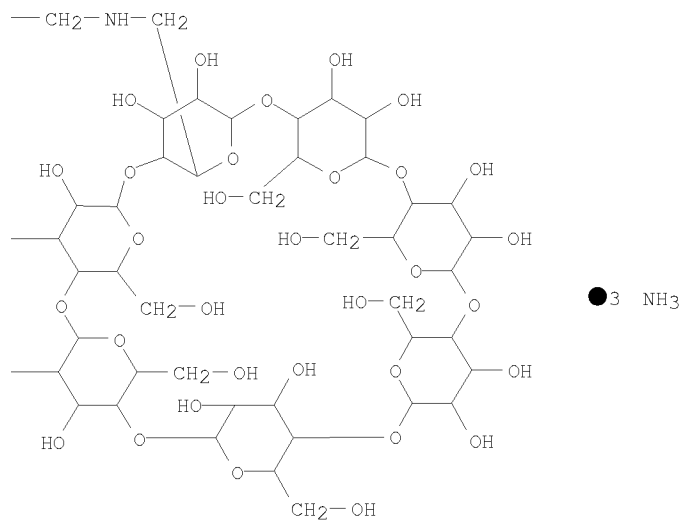
PAGE 1-A



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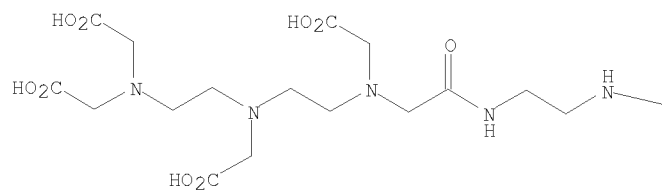


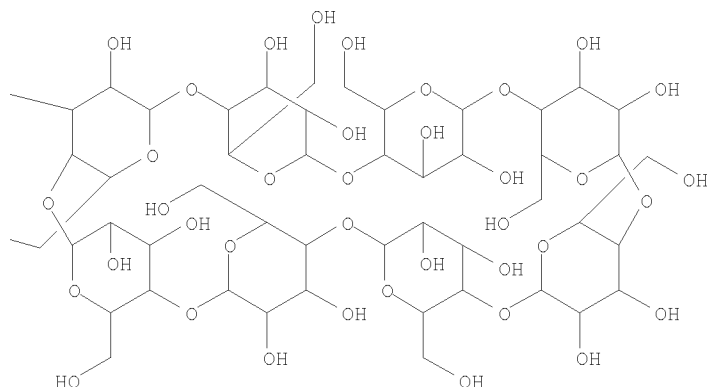
RN 155635-15-7 CAPLUS

CN  $\gamma$ -Cyclodextrin, 6A-[[13-carboxy-6,9,12-tris(carboxymethyl)-4-oxo-3,6,9,12-tetraazatridec-1-yl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

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L8 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:574166 CAPLUS

DOCUMENT NUMBER: 119:174166

ORIGINAL REFERENCE NO.: 119:30919a,30922a

TITLE: Preparation of anti-retroviral cyclodextrin polysulfate esters

INVENTOR(S): Moriya, Tamon; Kurita, Hiroki; Otake, Toru; Mori, Haruyo; Morimoto, Motoko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04309502	A	19921102	JP 1991-164079	19910408
PRIORITY APPLN. INFO.:			JP 1991-164079	19910408

OTHER SOURCE(S): MARPAT 119:174166

AB The title esters contain  $\geq 1$  glycosyl unit having deoxyamino group on C-6 position which is derived from amino acids, and multiple sulfate ester groups or salts thereof, and are prepared Heating mono[6-(N- $\alpha$ -benzyloxycarbonyltryptophyl)amino-6-deoxy]- $\beta$ -cyclodextrin in pyridine (Py) while stirring with SO<sub>3</sub>-Py complex at 100° gave the desired polysulfate ester.

IT 150213-94-8P 150213-95-9P 150213-96-0P  
150238-39-4P 150238-42-9P 150265-85-3P  
150266-06-1P 150319-89-4P 150319-90-7P  
150319-91-8P

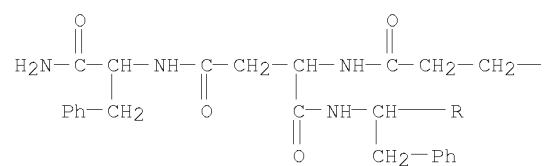
RL: PREP (Preparation)

(anti-retroviral, manufacture of)

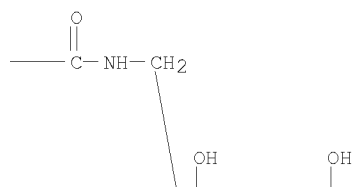
RN 150213-94-8 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

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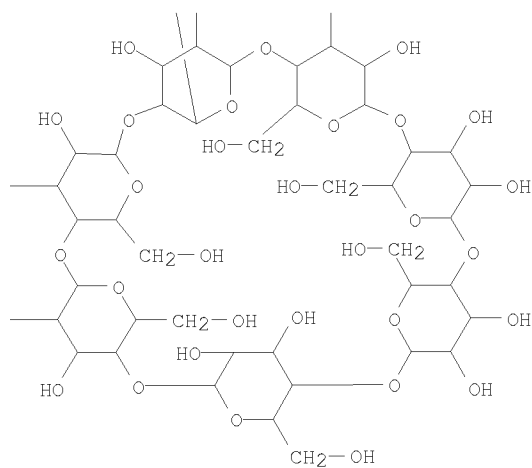


PAGE 2-A

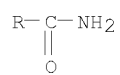
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PAGE 2-B



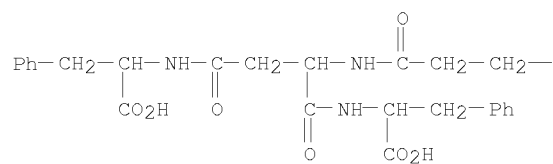
PAGE 3-A



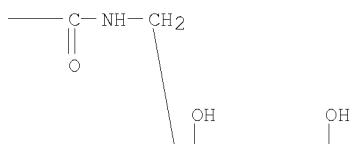
RN 150213-95-9 CAPLUS

CN  **$\beta$ -Cyclodextrin**, 6A-[[4-[[3-[(1-carboxy-2-phenylethyl)amino]-1-[[[(1-carboxy-2-phenylethyl)amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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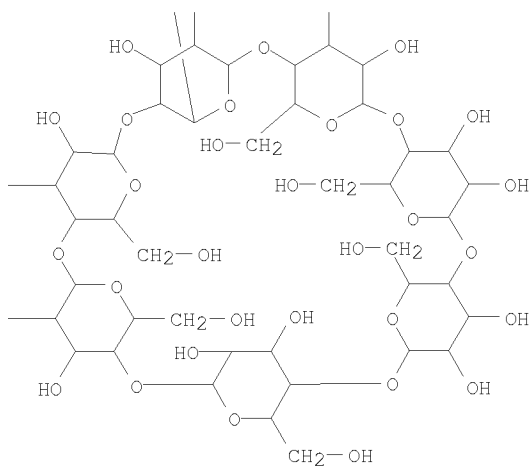


PAGE 2-A

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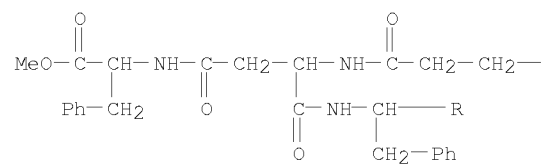
PAGE 2-B



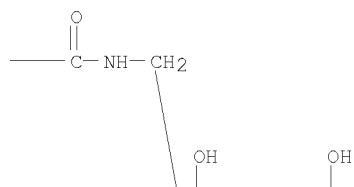
RN 150213-96-0 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[3-[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

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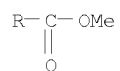
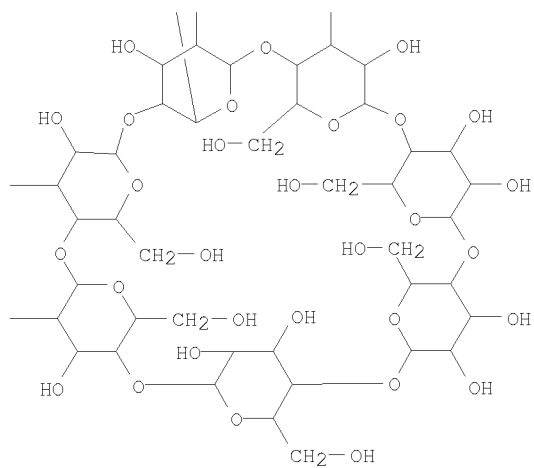
PAGE 1-B



PAGE 2-A

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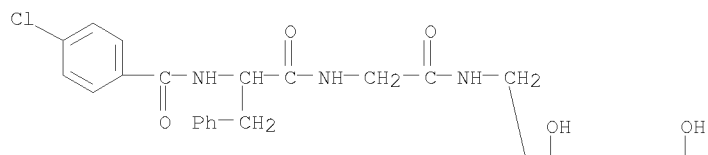
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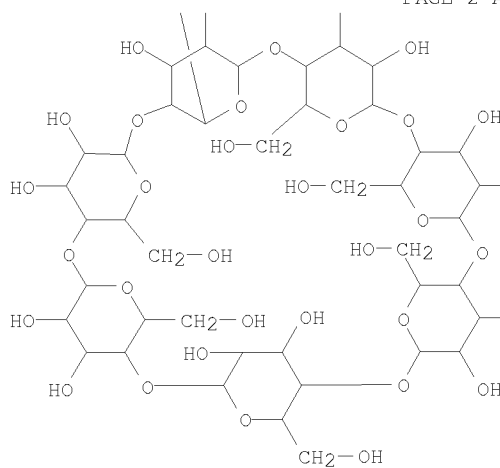
RN 150238-39-4 CAPLUS  
 CN  $\beta$ -Cyclodextrin, 6A-[N-[N-(4-chlorobenzoyl)-L-phenylalanyl]glycyl]amino]-6A-deoxy-, hexadecakis(hydrogen sulfate) (ester), hexadecapotassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 150238-38-3  
 CMF C60 H86 Cl N3 O37



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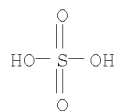
— OH

— OH

CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 150238-42-9 CAPLUS

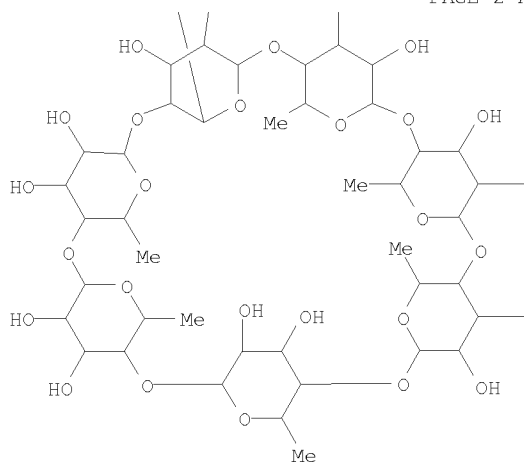
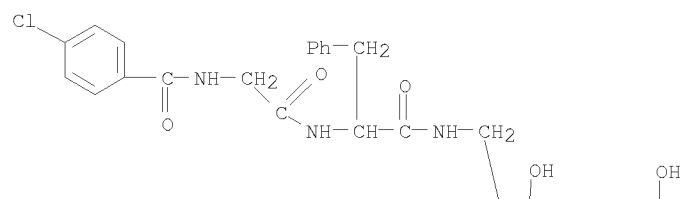
CN  **$\beta$ -Cyclodextrin, 6A-deoxy-6A-[[N-[[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]glycyl]amino]-, hexadecakis(hydrogen sulfate) (ester), hexadecasodium salt (9CI) (CA INDEX NAME)**

CM 1

CRN 150238-41-8

CMF C61 H89 N3 O38

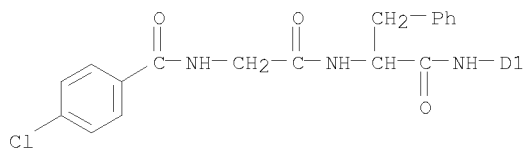
sulfate)



— OH

— OH

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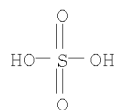


5 ( D1-OH )

CM 2

CRN 7664-93-9

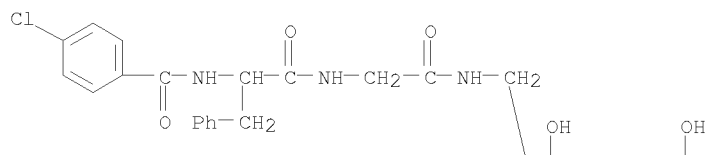
CMF H2 O4 S



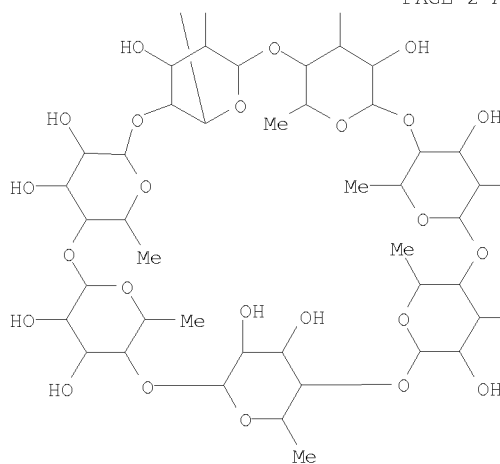
RN 150266-06-1 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A,6?-bis[[N-[N-(4-chlorobenzoyl)-L-phenylalanyl]glycyl]amino]-6A,6?-dideoxy- (9CI) (CA INDEX NAME)

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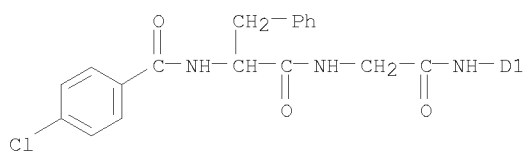


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PAGE 3-A



5 ( D1—OH )

RN 150319-89-4 CAPLUS

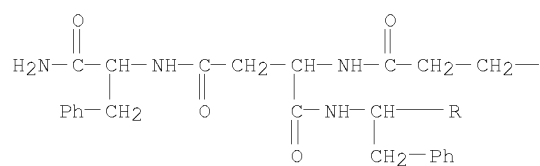
CN  $\beta$ -Cyclodextrin, 6A-[[4-[[3-[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[[2-amino-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy-, nonadecakis(hydrogen sulfate) (ester), nonadecapotassium salt (9CI) (CA INDEX NAME)

CM 1

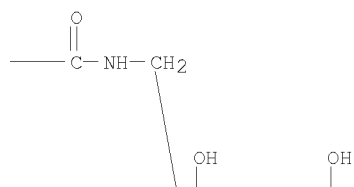
CRN 150213-94-8

CMF C68 H100 N6 O40

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PAGE 1-B

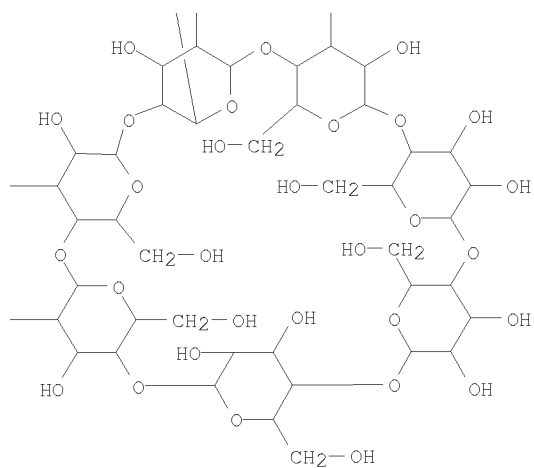


PAGE 2-A

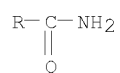
HO—

HO—

PAGE 2-B



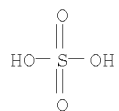
PAGE 3-A



CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 150319-90-7 CAPLUS

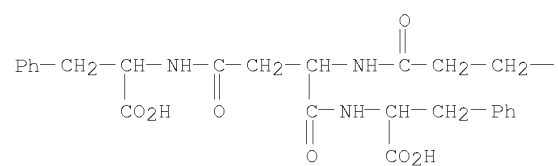
CN **β**-Cyclodextrin, 6A-[[4-[[3-[(1-carboxy-2-phenylethyl)amino]-1-[[[(1-carboxy-2-phenylethyl)amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-6A-deoxy-, octadecakis(hydrogen sulfate) (ester), octadecapotassium salt (9CI) (CA INDEX NAME)

CM 1

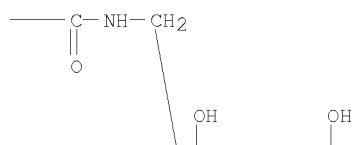
CRN 150213-95-9

CMF C68 H98 N4 O42

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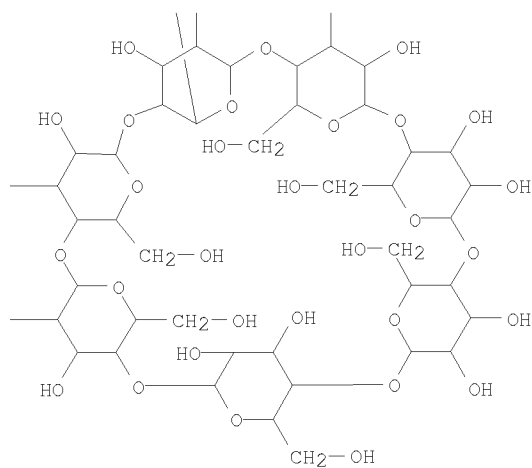


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PAGE 2-A

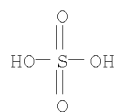




CM 2

CRN 7664-93-9

CMF H2 O4 S



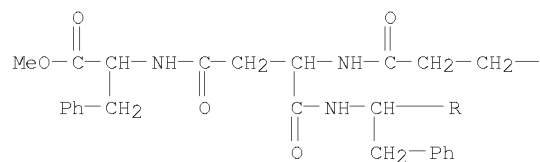
RN 150319-91-8 CAPLUS

CN  **$\beta$ -Cyclodextrin, 6A-deoxy-6A-[[4-[[3-[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]-1-[[2-methoxy-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-3-oxopropyl]amino]-1,4-dioxobutyl]amino]-, nonadecakis(hydrogen sulfate) (ester), nonadecapotassium salt (9CI) (CA INDEX NAME)**

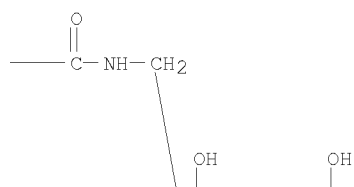
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CRN 150213-96-0

CMF C70 H102 N4 O42



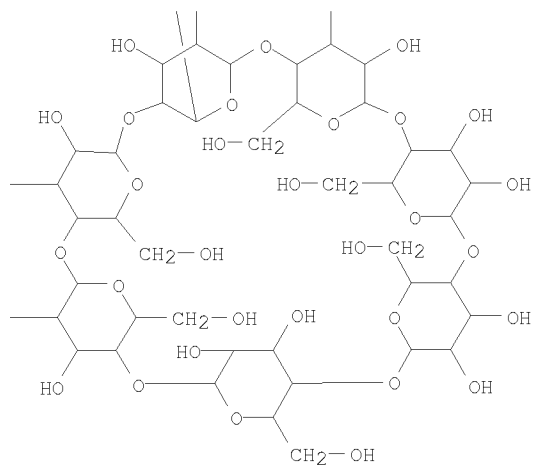
PAGE 1-B

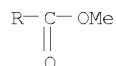


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 $\text{HO}-$  $\text{HO}-$ 

PAGE 2-B

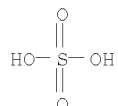




CM 2

CRN 7664-93-9

CMF H2 O4 S



L8 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:459831 CAPLUS

DOCUMENT NUMBER: 113:59831

ORIGINAL REFERENCE NO.: 113:10147a,10150a

TITLE: An approach to vectorization of pharmacologically active molecules: the covalent binding of Leu-enkephalin to a modified  $\beta$ -

cyclodextrin

AUTHOR(S): Parrot-Lopez, H.; Djedaini, F.; Perly, B.; Coleman, A. W.; Galons, H.; Miocque, M.

CORPORATE SOURCE: Lab. Chim. Org. 3, Univ. Paris V, Paris, F-75006, Fr.

SOURCE: Tetrahedron Letters (1990), 31(14), 1999-2002

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:59831

AB The neurotropic peptide Leu-enkephalin was coupled to a mono-6-amino permethyl  $\beta$ - cyclodextrin at the C-terminal residue. The resulting compound was fully characterized by proton NMR in D2O and d6-DMSO evidencing complete reduction of the mol. symmetry of the cyclodextrin.

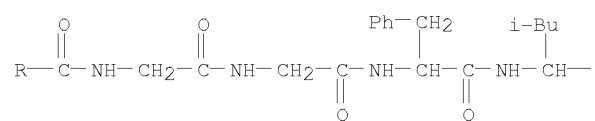
IT 128287-89-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

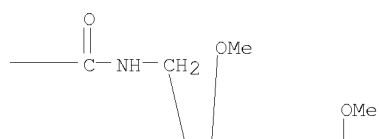
RN 128287-89-8 CAPLUS

CN L-Leucinamide, L-tyrosylglycylglycyl-L-phenylalanyl-N-(6A-deoxy-2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6B,6C,6D,6E,6F,6G-eicosa-O-methyl- $\beta$ -cyclodextrin-6A-yl)- (9CI) (CA INDEX NAME)

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PAGE 1-B

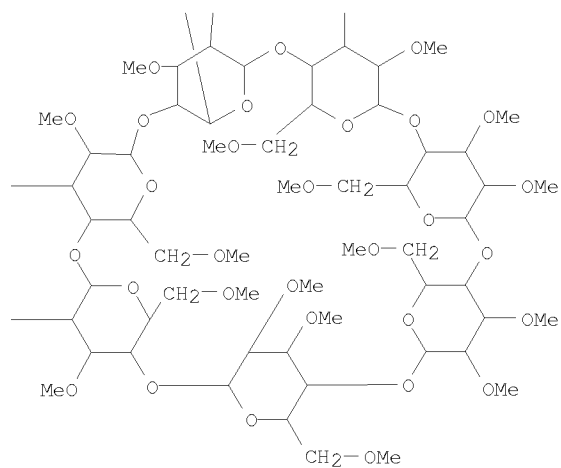


PAGE 2-A

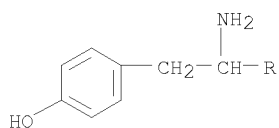
MeO—

MeO—

PAGE 2-B



PAGE 3-A



=&gt; D HIS

(FILE 'HOME' ENTERED AT 09:10:42 ON 01 MAY 2009)

FILE 'REGISTRY' ENTERED AT 09:10:52 ON 01 MAY 2009

L1 SCREEN 1953 AND 1842  
 L2 STRUCTURE UPLOADED  
 L3 QUE L2 AND L1  
 L4 12 S SSS SAM L3  
 L5 280 S SSS FULL L3

FILE 'CAPLUS' ENTERED AT 09:13:07 ON 01 MAY 2009

L6 85 S L5  
 L7 41018 S CYCLODEXTRIN  
 L8 61 S L6 AND L7

=&gt; LOG H

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

352.78

540.32

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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STN INTERNATIONAL SESSION SUSPENDED AT 09:21:06 ON 01 MAY 2009